

MACDONALD COLLEGE JOURNAL



VOLUME 5
No. 7



MARCH
1945

Farm · Home · School

WHAT ABOUT FINANCING IN YOUR POST-WAR PLANS?



As you plan ahead to meet the new needs and changing conditions of the post-war period, you may be faced with problems of financing in which we could help you.

We are giving thought to many such problems and are making preliminary estimates of our customers' probable requirements in the years immediately ahead.

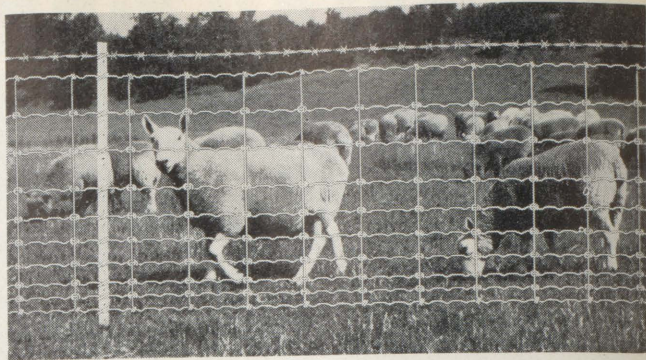
If you feel we can assist you, we shall be glad of the opportunity of discussing your plans and problems with you in confidence. You will appreciate the interested approach and helpful counsel of our officers.



BANK OF MONTREAL

*working with Canadians in every walk
of life since 1817*

DOSCO "SECURITY" FENCING



All that its name implies!

You can count on Dosco "Security" for any farm fencing or gate job. Good looking, durable — made to the rigid standards of the American Society for Testing Materials.



DOMINION STEEL & COAL

Corporation Limited

Fence Sales Division

Canada Cement Bldg.

Montreal



Extra

QUALITY MILDNESS VALUE

Roll your own
for extra mild,
fine Virginia cigarettes.



SOIL CONSERVATION

RUNNING thru several of the recent issues of this Journal, there have been a number of articles on that very important subject — soil conservation. A series of these were from the pen of the well known authority, Dr. A. L. Patrick, presently Regional Conservationist for the north-eastern district of the U.S. Mr. R. C. Parent of the Illustration Farm staff for N.B. also contributed, showing the pressing need for conservation measures in his province.

The Soil Conservation Service of the U.S. Dept. of Agriculture has been in existence for many years, and its energetic chief, Dr. H. H. Bennett, has unceasingly urged the need for concerted effort in conservation measures for the whole of that vast country to the south of us. It has been until recently an uphill fight. Intense activity began during the period of the depression as a partial means of utilizing the unemployed. From this beginning there has emerged a closely-knit organization covering every part of the States. With headquarters in Washington, the service is decentralized into some seven or eight regions, each possessing within themselves rather similar characteristics. Within regions the state lines are utilized for the next subdivision and finally districts within states. Great care has been exercised in the choice of personnel — men of maturity, experience and good judgment are available to advise on the many and diverse problems which present themselves.

Soil conservation is federal in its primary organization, but finds its active expression within the jurisdiction of the several states. Great care and skill of a high order are evident in the integration of the federal ideas with the state. One of the soundest features in the whole plan is the establishment within each district of a local board of supervisors, made up of landowners. The demand for conservation work arises from the farmer himself, the local board reviews the request, and if deemed advisable makes available the machinery to carry out the undertaking in accordance with the advice of the conservation specialists. There is no bonusing — all work undertaken is at cost price.

A feature of this service which impresses one strongly is the comprehensive way in which it is being

approached. Piecemeal attacks, first on one phase, e.g. drainage, then on another such as pastures, has been done away with, and the whole farm enterprise is reviewed and planned as a unit. Thus we find the larger issue of soil conservation involves such things as land utilization, more convenient planning of the farm fields, strip cropping, drainage, pastures, forestry (in this case the farm woodlot), and all the many other factors inherent to the farm. The proper control of water is one of the most important measures to be dealt with, and the much more extensive use of forage crops with their valuable sod-forming habit, preventing erosion and building up organic matter, is also a prominent feature.

Owing in large part to the climate, soil conservation is admittedly far more important, on the whole, in the United States than it is in Canada. In the U.S. large areas to the south seldom if ever have their agricultural soils frozen during the winter, rather they are left exposed to leaching rains and thus suffer from runoff and gullying to a tremendous extent. Canadian soils are frozen on an average for five months out of the year, thus preventing such loss.

Our open season is, however, quite long enough to permit staggering losses of soil, particularly in the more undulating parts of the country. One has but to observe the muddy brooks and rivers following our not infrequent downpours of rain. The older sections of the province where farming has been carried on for one hundred years or more present frequent evidence of

(Please turn to page 13)

Our Cover Picture

March heralds the arrival of many welcome signs of spring. This month's cover picture shows an unusually interesting collection of wild black ducks, mallards and sea-gulls taking advantage of the thawed marshy shoreline on Lake Ontario, with ice-filled water in the background. The birds stayed here because food had been provided for them by bird-lovers. A quiet approach made the photograph possible; it was taken by W. E. Swales in early March, 1943.

The Macdonald College Journal is owned, edited and published monthly by Macdonald College. All correspondence concerning material appearing in the Journal should be addressed to: The Editor, Macdonald College, Que.

Chairman of the Board: W. H. Brittain, Ph.D., *Editor,* A. B. Walsh, B.Sc.(Agr.); *Associate Editor,* H. R. C. Avison, M.A. *Circulation Manager,* L. H. Hamilton, M.S. *Business Manager,* T. Fred Ward. For advertising rates and all correspondence concerning the advertising section write to the *Advertising Representative,* E. Gross, 6381 de Vimy Ave., Montreal; telephone ATLantic 4739. Subscription rates — 50 cents per year.

Macdonald Gets a New Sheep Flock

Ten North Country Cheviot breeders have recently consigned to Macdonald College ten ewes and one ram. This was done in an effort to further establish the high quality and wide adaptation of this practical sheep which has meant so much to the farmers in the Northern section of Scotland. These sheep arrived early in February and already have aroused much interest and favorable comment from breeders and Government officials from various sections of Canada. They are a rugged uniform lot of good size. Being somewhat longer and generally better fleshed along the back and legs and possessing a very useful fleece of good quality they give promise of finding an important place in the sheep producing areas of Canada. Cheviot breeders will find them a bit different in appearance about the head because of a somewhat larger, heavier ear but in a general way they have that alert appearance and style which is so characteristic of the breed.

The whole idea grew out of a visit to the College by Capt. W.A.M.M. Innes about a year ago. Capt. Innes having been born and reared in the North of Scotland had not lost his interest in the "Gay Cheviot Sheep" as he described them, in spite of the fact that he has spent most of his life in Saskatchewan. His wife, Mrs. Innes, equally enthusiastic, had insisted that he see the College Cheviots while he was stationed at Petawawa. The College Cheviots, although from the South of Scotland, were quite attractive and somewhat larger than expected. Their uniform type, quality and character was impressive. They had adapted themselves to Canadian conditions satisfactorily. Since that was true, would not the North Country ewe prove even more acceptable, he argued. Having been developed in the fertile pastures of Caithness and the limestone area of Sunderland they were a more vigorous and larger type of good quality. "The Cheviot ewe had established herself as the supreme ruler in Britain in spite of many competi-

tive commercial breeds," he stated. They have been successfully used in crossing with the Leicester, Oxford, Suffolk and Southdown breeds. Their beauty, gay style, hardiness and milking qualities are unsurpassed. They produce early maturing lambs of good carcass excellence and are quite prolific. To be more convincing Capt. Innes enquired whether we would accept a flock for trial and experimental work.

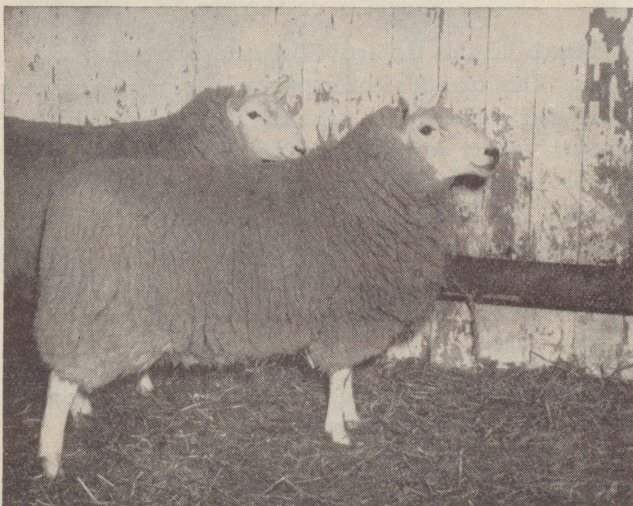
On his return to Petawawa, Capt. Innes got in touch with the North Country Cheviot Sheep Breeders Society and arrangements were soon effected to have the sheep shipped. Numerous difficulties were encountered involving both time and expense. This additional expense was borne by the Society and other interested parties.

Realizing the difficult problems that Scottish farmers have been faced with during the long period of war, this contribution is deserving of wide recognition. It is still another expression of good will so firmly established between Scottish and Canadian people. It is interesting to note in this connection that Dean Sinclair Laird, Head of the School for Teachers, came from this same district and that his grandfather operated two of the farms, Castletown and Canisbay, from which the sheep were shipped.

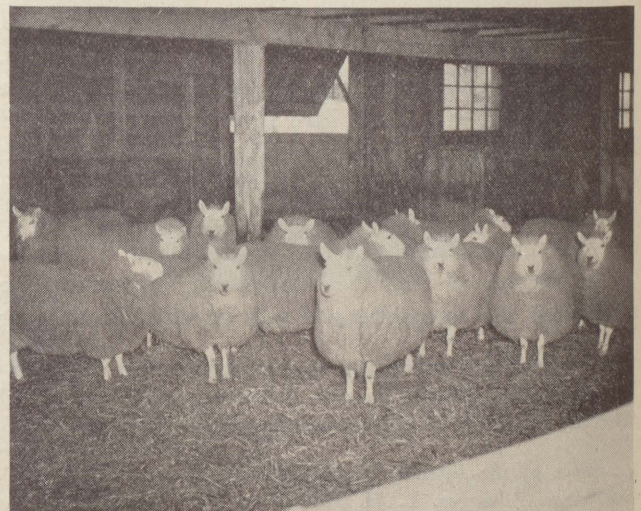
Nova Scotia Jersey is Canadian Champion

The Jersey cow, Bayvue Belle, bred by A. P. Semple & Son, Tatamagouche, and owned and tested by J. P. Norrie, Truro, has been acclaimed the champion butterfat producer of the Jersey breed in Canada in 1944.

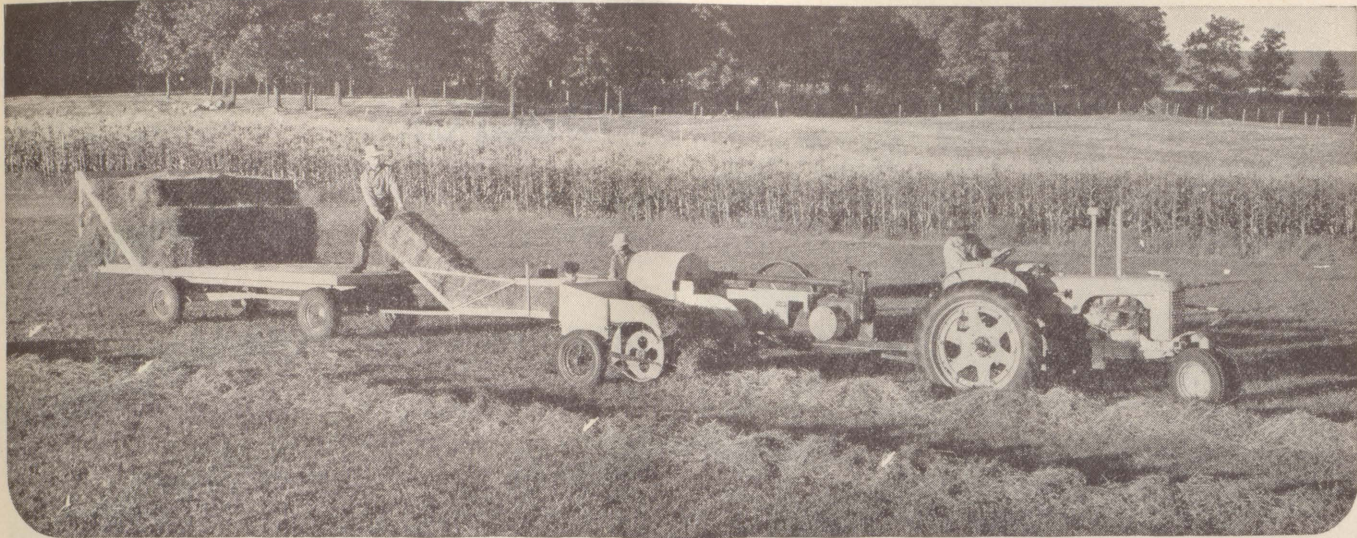
She also leads all Jersey cows milked twice daily for milk production. Her record of 15,346 lbs. of milk and 556 lbs. of fat, is the highest record ever made by a Jersey cow in the Maritime Provinces.



Two of the newly acquired North Country Cheviots.



South Country Cheviots, the type most familiar to Canadian breeders.



Green Fields Unfold New Farm Wealth..

★ When your fathers were in their youth hay was regarded mainly as roughage to round out the grain ration of farm animals, to dilute it for digestion. Yet that roughage was made from the same crops which, as pasture, produced the richest milk from dairy cows and the most rapid growth in young animals.

Today, science tells how old-time hay lost its value between meadow and manger. It shows how bleaching destroys the pro-vitamin carotene, how moisture steals minerals, how protein perishes with every hour of undue delay before or after cutting. In particular, research reveals that saving the pasture value in hay is largely a matter of saving leaves and preserving green color.

Founded on practical experience and fortified by the findings of science is the Case System of making hay. It begins with cutting when protein

is high, continues with swift air-curing in wind-rows that shelter leaves from bleaching and shattering, concludes by baling into "Packaged Pasture" with the new Case Sliced-Hay Pick-up baler. So successful are these simple steps that alfalfa from sliced bales has analyzed over 18 percent protein—half as much as that favorite concentrate, linseed meal—plus three times the usual top limit of carotene.

Designed to provide "packaged pasture" for the individual farmer, the Case Slice-Hay baler helps to produce extra milk or meat which often pays back its price in a few seasons. It is one of many Case machines whereby the findings of science are transformed into practical methods for easier, faster, more profitable farming. Case films and bulletins on various advanced practices are available for your use. J. I. Case Co., Toronto, Ont.



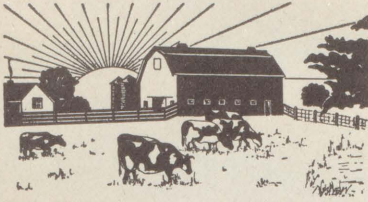
CASE



SEVENTY-SEVEN MACHINES FOR MODERN FARMING

For the great place of grasses and legumes in conservation farming and the growing emphasis on forage feeds, Case has a host of implements and machines, each proved for performance and endurance. The Case Seedmeter drill with grass seeding attachment sows both fine forage seeds and the nurse crop of grain—both with the amazing accuracy of the Seedmeter mechanism.

ADVANCED PRACTICES MAKE FARMING MORE SECURE



AGRICULTURE

Articles on problems of the farm

Sprayer Overhaul

by J. H. Cooper

The modern high pressure spray rig is a precision outfit which must be kept in first class condition if best results are to be obtained. Many of the older types of pumps, while not operating at as high pressures, must also be kept in good shape if they are to perform satisfactorily.

This requires at least an annual inspection and adjustment of all the component parts. This overhaul should be carried out at some time previous to the time of spray application, to ensure against break-down and loss of valuable time when the spray is being applied.

The first step in the overhaul procedure is to clean thoroughly the entire spray outfit, then carefully examine all parts for wear, breaks and cracks. If parts such as the chain drive, and sprockets are so badly worn that the chain slips off the tooth of the sprocket, they should be replaced with new ones; if slack, but not too badly worn, they should be tightened by the means provided. The agitator blades or slats in the tank must be firmly attached to the rotating shaft if agitation in the tank is to be positive. Agitator shaft packing nuts are turned until tight, then backed off approximately one-fourth turn. If the packing still leaks when tightened, replace the packing. Split water-pump packing rings (available at garages) are ideal for this purpose.

The wooden tanks on some spray rigs will probably have dried out over the winter, leaving cracks between the staves. It will take some time for the water to soak into the wood and expand the staves to make the tank-water-tight. Place burlap bags about the inside of the tank to prevent the water from leaking out too fast; hot water or steam may also be used for this purpose. Any scale or loose material inside the tank should be removed to prevent it being sucked into the pump and causing damage. After the water has expanded the wooden staves the metal hoops may be tightened if necessary, but under no conditions, should the hoops be tightened before the wood has been expanded by the water.

How the Pump Works

On the suction stroke of the pump, the spray material is drawn from the tank through the suction line in which are placed a sediment trap and strainer. This sediment trap and strainer must be cleaned to allow free flow; the line should be checked for leaks which will allow air to be

drawn in with the liquid to disturb the operation of the pump.

The spray material then passes through the inlet valves to the pump plunger. It is very important that these valve balls provide a perfect fit with the valve seats to prevent leakage back into the suction line. The modern tapered valve seat is made of hardened and ground stainless steel and pressed into a tapered well in the pump base and can only be removed with a special puller supplied with each pump. All ball valves and valve seats should be removed and carefully cleaned and examined. Valves and valve seats are cleaned by putting them in a glass dish and covering them with hydrochloric (muriatic) acid for 10 to 15 minutes, then thoroughly rinsing with water. Valve seats which are pitted, out of round or more than $\frac{1}{16}$ inch wide should be replaced. Valve balls which are pitted or badly eroded should also be replaced. Valve balls and seats are examined by holding them in position and looking towards a light. The above procedure should be carried out with outlet. Check valve on the discharge side of the pump and pressure regulator valves and seats. Keep in mind that a poor fit between valve ball and seat will allow a great deal of spray material to leak by.

Modern pressure pumps have guides to absorb the side thrust on the cylinder walls due to the angularity of the connecting rod drive. If the guides are worn, they will allow the plungers to "rock" in the cylinder, speeding up the wear on the cylinder walls and on the plunger cups. Scored or pitted cylinders will result in leaks past the cup

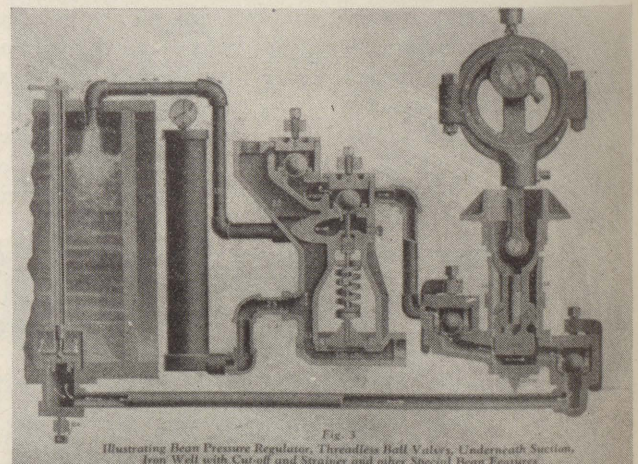


Fig. 3
Illustrating Bean Pressure Regulator, Threadless Ball Valves, Underneath Suction, Iron Well with Cut-off and Strainer and other Special Bean Features

With so many moving parts, spray pumps must be checked for wear periodically.

and also cause rapid wear on the cups. Worn plunger cups should be replaced.

Maintaining Pressure

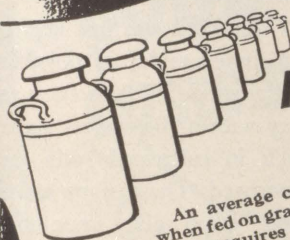
The pressure regulator is standard equipment on all modern spray pumps and while the arrangement of parts may differ in the various makes, the basic principle of design and operation is similar. The operation of the pressure regulator is as follows: when the spray guns are turned off the pressure is raised to the point at which the regulator is set, the pressure regulator valve opens and the check valve on the discharge line closes (maintaining operating pressure at the guns), the pump merely pumps liquid back to the tank through the overflow pipe at very little pressure. This relieves the engine of the heavy pumping load and it idles during the period when the regulator valve is open. The various makes of pumps have different adjustments as given in the handbooks which come with the machine. Each operator should familiarize himself with the particular adjustments of his machine to obtain best operation.

The amount of spray application is determined by the spraying pressure and by the size of the hole in the spray disc in the gun. The rate of wear of these disc holes is rapid, due to the abrasive and corrosive action of the spray material. It should be noted that the area of a circle varies with the square of the diameter so that a small increase in diameter will greatly increase the amount of material discharged. Failure of the pump to maintain its proper operating pressure may sometimes be traced to this enlargement of disc holes, thereby exceeding the rated output of the pump. The remedy is, of course, replacement of the spray discs. Worn spray discs will also alter the shape of the spray cone and result in uneven or poor coverage. A good check to determine the capacity of any spray pump is, with all guns open and at regular operating pressure, about ten percent of the spray material being pumped should be returned to the tank through the overflow pipe. This will ensure sufficient capacity when the normal wear results in a slightly lower output from the unit.

Failure to maintain pumping pressure and output in those sprayers which are driven by a separate gasoline engine, may sometimes be found in the power unit itself. With the usual type of stationary farm gas engine, the most common cause of poor engine performance is the late opening of the exhaust valve to clear the cylinder of burnt gases. This can be checked roughly by turning the fly-wheels until the exhaust valve just starts to open and then noting the angle that the crank arm makes with the lengthwise axis of the cylinder. The usual figure is 45 degrees before outer dead centre. The length of the push rod should be adjusted so that the valve does open at this point.

The valves and piston rings are checked for compression by cranking the engine. Poor compression may result from poor seating of the valves or worn rings. If piston rings are suspected as being the cause, pour a few table-spoons of a heavy cylinder oil through the spark plug hole and then crank the engine. If the engine is much harder to crank with the addition of oil, then new piston rings will be required.

ARE YOU GETTING DAIRY PROFITS Both Ways?



An average calf when fed on grain, hay and milk, requires almost a ton of milk from birth to six months! Give your calves "Miracle" Calf Meal and you will have 80% more milk to sell!

MORE MILK LESS FEED



By using "Miracle" Calf Meal you raise your calves at least 4 months earlier than usual... thus saving 4 months feeding costs. Every bag of "Miracle" Calf Meal contains ingredients tested for food value.

● Also milk production can be closely controlled by the quality of feed you give the cow.

Thrifty farmers use "Miracle" Dairy Feeds because they know that every ingredient in "Miracle" Feeds is tested at the Ogilvie Laboratories to make sure the exact food values in balanced proportions go into the "Miracle" bags. This scientific testing assures the cow of everything she needs for abundant milk production. Keep a careful check on the milk production of each animal. Accurate knowledge enables you to keep up the milk flow of each cow at a minimum feed cost. Remember less "Miracle" Dairy Feed gives more milk. Next time . . . ask your dealer for "Miracle" Dairy Feeds in the dotted bag.

"MIRACLE"

DAIRY FEEDS

If it's Ogilvie... it's good!



THE OGILVIE FLOUR MILLS COMPANY LIMITED

M44-20

Of What Use is a Soil Survey?

by W. A. Delong

Encouraging evidence of a healthy interest in soil problems recently has been provided by the reports of discussions by Radio Farm Forum groups. By common consent soil surveys were given a place of importance. At the same time, it was shown that a considerable number of farmers living in areas which have been surveyed did not know that the survey had been made. This fact may seem surprising. At any rate it suggests that there is need for information about soil surveys and soil survey reports. It also suggests that the aims, uses and present limitations of soil survey information may not be well understood.

The modern or systematic soil survey is of very recent origin. Fifteen years ago work of this kind was just beginning in Canada. Such surveys are based as far as possible on the study of undisturbed or virgin soils. This is because soils in the undisturbed state carry within themselves signs of their origin and nature which in cultivated soils are not readily seen or have been destroyed. These signs assist in classification and, in addition, often give important indications of fertility and usefulness. The first objectives of systematic soil surveys are to find out what kinds of soil there are in a given district, and to show the location and extent of each of these on a map. It is important to determine the total area occupied by each kind of soil. This should be done so that the accumulated experience of all the workers on that soil may be brought to bear on the problems of management and fertility involved in obtaining maximum profitable production. A knowledge of the local soil map is a valuable aid to the intelligent discussion of the soil problems of the neighborhood and the district. This is one of the uses of that most essential part of all soil survey reports, the soil map.

The soil survey report marks the end of a beginning;

the beginning of a systematic study of the soils of all Canada. The fact that the report is part of a beginning rather than an end must be strongly emphasized, since it is in connection with the present usefulness of such reports that misunderstanding is perhaps most likely to occur. It would be quite wrong to suppose that the publication of the report of the soil survey of a district leads at once to definite and final recommendations concerning all the soil problems of that district. On the other hand, it is equally true that such reports do contain much very helpful information.

Mapping and Classifying Soils

In order to make an accurate soil map the soil surveyor must examine carefully and describe as accurately as possible the different kinds of soil which he finds. His descriptions, as given in the soil survey reports, are directly useful in a number of ways. For example, the surveyor's examination enables him to say whether or not the need for liming or for improvement of drainage may be limiting the production of all or of certain crops. Depth of soil also is commonly reported. This is highly important in relation to the productivity and length of life of fruit trees. It may also be an important factor in the production of other deep-rooted crops such as clover and alfalfa.

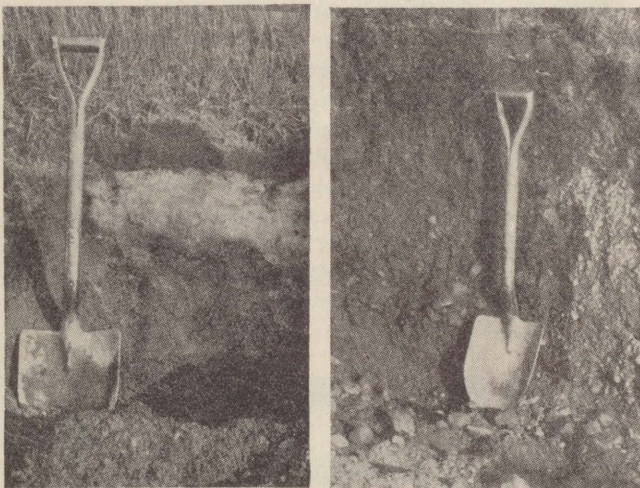
The soils may be classified on the fertility basis. This classification is based on the origin and nature of the soils and on their productivity under present management. At present, estimates of productivity generally are made from observation of the growing crops during the course of the survey and on information regarding crop yields received from farmers. In some instances the surveyor's examination of the soils enables him to say whether or not certain fertilizers are likely to give good results.

Suggestions often are made with respect to the suitability of the different soils for various uses. Thus, it may have been found that certain soils should remain in forest or should be re-forested. Other soils may be useful as pasture land but should not, because of stoniness, danger of erosion, etc., be employed for cultivated crops. The report also may give an estimate of the degree of erosion which has occurred on pastured or cultivated soils, or which is likely to occur if present management practices are continued.

Enough has probably been said to make it clear that soil survey reports contain information which is highly important and which should be widely known if the best use is to be made of the land. The soil survey report is, even in the present state of incompleteness of our knowledge, an important aid to intelligent farm practice.

More Information Needed

One of the most important factors limiting the present usefulness of the soil survey is the frequent lack of exact experimental information respecting the management of



Left: A heavily leached sandy podsol at Rougemont, P.Q.
Right: Characteristic "Champlain Terrace Gravel" at Rougemont, P.Q.

the different kinds of soil, or the soil types, as they are often called in soil survey reports. Until this kind of information is available, definite recommendations cannot be made with complete safety. The soil survey does, however, provide a knowledge of the extent and the location of the different soil types. It therefore simplifies the collection of such information and helps to explain the variations which may occur from place to place. The completion of a soil survey in a district tends, therefore, to shorten the time required to obtain the sound basis of facts essential to recommendations for the improvement of soil management. It is most important, however, that the present frequent lack of exact information should be recognized clearly, otherwise the future usefulness of the soil survey may be impaired. The need for further information respecting the management of our soils is recognized by soil workers, and every effort is being made to correct this deficiency. There will inevitably be some delay since time is required for the collection of sound information of the kind needed.

Farmers Can Help

Further work is needed before the soil surveys can reach their greatest usefulness. Farmers themselves can help greatly in increasing this usefulness. It has already been suggested that the local soil map is of value as an aid in the discussion of the soil problems of the neighborhood and district. Careful study, by themselves, of the accumulated experience of all the farmers of a district who are working the same kind of soil undoubtedly will yield conclusions of value. Of course it is often true, especially in eastern Quebec and the Maritimes, that not all the farmers of a discussion group will be farming the same kind of soil. But exchange of information across soil boundaries can be very valuable. It may show that in the production of certain crops, for example pasture, two or more types of soil may behave very similarly. It is as important to know that as it is to know that the differences in crop response at two locations may be, at least partly a result of difference in soil type. Of course, it must always be kept in mind that differences in present crop production or in response to fertilizers may be affected as much or more by the past history of the field or farm as by soil type. Not all the farms of a neighborhood have been managed with equal efficiency or care.

The soil survey report is an end of a beginning. It provides useful information for present use and helps to direct profitably the consideration of the soil problems which occur in the area which it covers. Careful study and thoughtful discussion by the workers of the land themselves will contribute very greatly to the future usefulness of the soil survey. Indeed, it is not too much to say that, without such action on the part of those occupying the land, the full possibilities of the soil survey never can be realized.

Next month — Using a Soil Analysis



**"GOOD PAINT
costs so little-"**

YOUR farm property is too valuable to you and to your country at war to leave it to the tender mercies of wind, weather, frost and Father Time. It needs the protection of the best quality paint. And, in these days of wartime conservation of materials, every gallon of paint must give you the utmost in coverage, hiding power and long life protection. That means using Sherwin-Williams Paints, for your farm buildings, house, implements and fences. Inside the house, too, you'll need Sherwin-Williams because they beautify as well as protect; ask your Sherwin-Williams Dealer to lend you his illustrated Paint & Colour Style Guide — it's chock full of good ideas on decoration.



THE SHERWIN-WILLIAMS Co.
of Canada, Limited
 Head Office MONTREAL

**CONSULT YOUR LOCAL
 SHERWIN-WILLIAMS DEALER**

S.W.P. COVERS THE EARTH

S.W.P. COVERS THE EARTH

S.W.P. COVERS THE EARTH

S.W.P. COVERS THE EARTH

Engineering on the Farm

by L. G. Heimpel

A Home-made Power Drag Saw

Once electric power is available on a farm dozens of things can be done by power which formerly meant long hours of hand work. One of these jobs is the cutting of logs and poles into firewood lengths. The accompanying drawing shows a sawing outfit which can be made from materials available on almost any farm and requires only a quarter horse power motor to drive it.

This design was first originated by Professor Sharp of Tennessee and since then several American Power Companies have been distributing plans for their farm customers. Thousands of them seem now to be in use.

The job requires a 2 by 6 inch plank 8 feet long, to one end of which are fitted sloping legs as shown in the drawing. These legs should be carefully fitted and then fastened to the plank with bolts rather than nails. The crank wheel, which is the main part of the machine, should be a front wheel from a light car, one from a Model A Ford usually being preferred. If the tire is available with the wheel, so much the better, and it should be inflated.

The crank for the saw pitman is made from a piece of $\frac{1}{2}$ by $1\frac{1}{2}$ by 12 inch piece of flat iron which is welded to the face of the wheel hub and, at its outer end, to the rim of the wheel. The crank pin is a $\frac{3}{4}$ by $4\frac{1}{2}$ inch machine bolt welded to the end of the crank arm. This bolt then passes through a hollow wrist pin of an auto engine, the wrist pin being welded into a hole drilled through the end of the pitman.

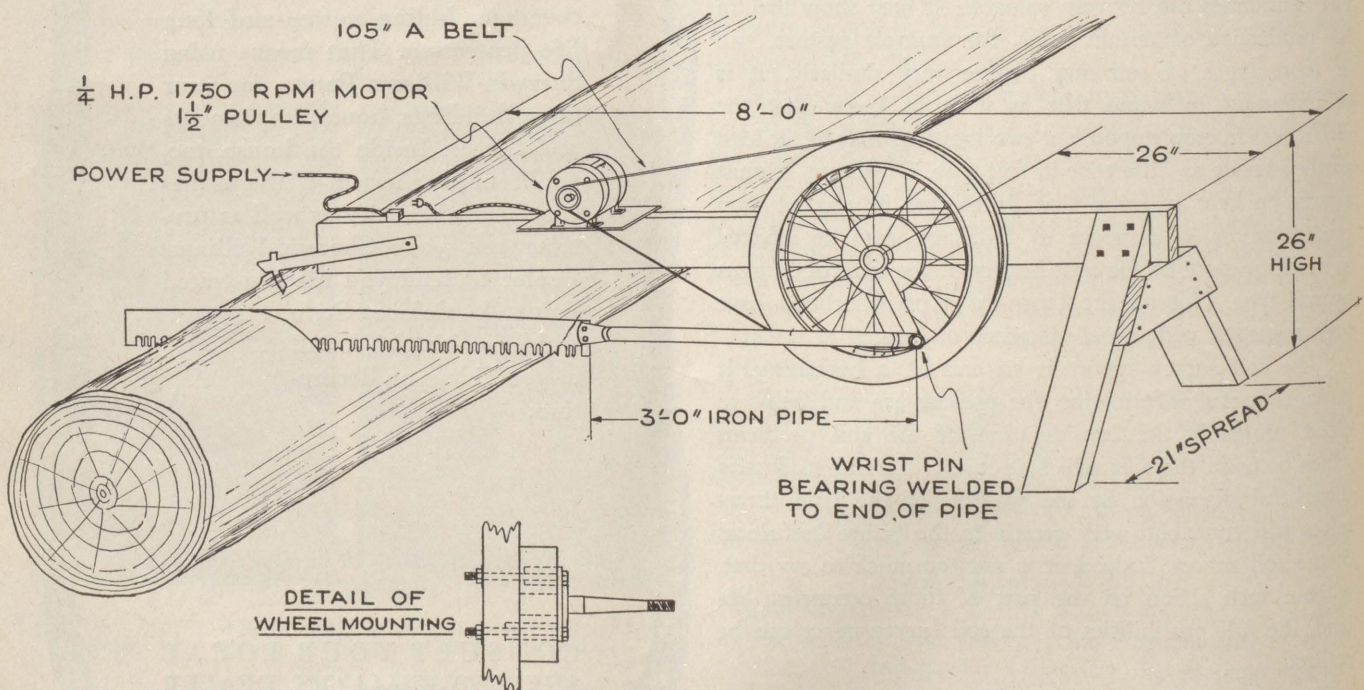
The pitman or connecting rod is made of a piece of $1\frac{1}{4}$ inch piping a few inches over 3 feet long. One end

is flattened and drilled for the wrist pin bearing, while the other end is split was a hack saw about $21\frac{1}{2}$ inches from the end and is then heated and flattened and drilled for bolts to attach it to the saw blade.

The hub of the auto wheel is bolted to the side of the plank at a point 26 inches from the stand end of the outfit, a 2 inch block being placed under the hub plate to permit the brake drum of the wheel to clear the plank. Finally, a log-holding dog should be made from a heavy piece of flat iron about 15 inches long and fastened to the front end of the plank by a half inch bolt. The spur of the dog should be sharp enough to permit it to be driven into the log by a light blow from a hammer or axe.

The motor should be fitted with a $1\frac{1}{2}$ inch grooved pulley and is bolted to the top of the plank so that the pulley is in line with the centre of the wheel. The belt should be a small V-belt and must be long enough to go around the wheel and over the motor pulley. A belt about 105 inches long is correct. The motor is backed into the belt and bolted in position to suit the length of the belt. The motor should run counter clockwise when viewed from the pulley end, so that the crankwheel will push the saw toward the log at the top of the stroke.

In operating the saw a switch may be used to start the motor and to stop it at the end of a cut, or a plug and outlet box may be employed. When the saw is almost through a cut the operator should hold the pitman to prevent the saw striking the ground. It is a simple outfit which can readily be operated by one man and he will be free to split some of the blocks while waiting for the saw to do the cutting.



Old Automobiles Can Be Dangerous

As our automobiles get older the danger of poisoning from carbon monoxide gas may increase very rapidly, as corrosion of the exhaust piping and mufflers often occurs in such cars. This deadly gas, which can't be seen, tasted or smelled, is likely to be most dangerous in winter driving when windows of cars are kept nearly closed for comfort.

Frequently one hears of cases where people, snow-bound for several hours in a storm, kept the engine of their car running in order to keep warm, but carbon monoxide took their lives before help arrived. To prevent the possibility of such tragedies owners of farm automobiles should pay attention to these reminders.

1. Keep the engine of the car in good condition.
2. Keep all exhaust piping and manifold connections tight and replace corroded piping or muffler parts at once.
3. Examine the floorboards of the car, and, if necessary place new felt over the joints, and around the steering column, brake and clutch pedals.
4. Open the garage door before starting the car.
5. Never run the engine of a standing car to keep warm.
6. Always allow some fresh air to circulate through the car, even in cold weather.

Less New Machinery for 1945

From the rather plentiful supply of new farm machinery that was made available for Canadian farmers during 1944 many people got the idea that the peak of the steel shortage had been passed and that 1945 would see a similar or even better machinery picture. This has turned out to be a false hope, however. The fact is that the war is calling for much larger supplies of munitions and steel equipment than had been anticipated, with the result that there will be sizable reductions in new farm equipment this year. On an average the reduction will be about 15 per cent, but in some lines it will actually be greater.

It will be necessary, therefore, once more to concentrate on the repairing of old equipment to get it into shape for another year's trouble free operation. Much of this repair work can be done with equipment available on the farm, or the local implement dealer or garage mechanic may be in a position to help with the job. There will be plenty of parts available, but they should be ordered at once or there may be some disappointments.

Things likely to be needed for spring work are the sharpening or renewing of drag harrow teeth, new points for spring tooth cultivators, new bearing liners for disc harrows and perhaps new grease cups for these bearings and maybe the disc harrow needs a new set of cleaners to make it do its best work. Then, almost all implements which have been used for some years have loose bolts that should be renewed or spring washers to be placed under the nuts to take the looseness out of the frame. Fortunately most old implements react very favorably to even a little of ordinary maintenance.



"For results that pay — feed the PIONEER way"

says Mr. Pioneer

237

PIONEER

Profit Proven **FEEDS**

Tractors or Horses for Farm Use

About fifteen to twenty years ago many articles appeared in the farm press on the subject of tractors versus horses for power on the farm. Agricultural engineers usually sidestepped these arguments, because they felt that time alone would produce the answer to them. Now it is clear that the question is settling itself.

Recently, Mr. L. B. Thompson, Superintendent of the Swift Current Experiment Station in Saskatchewan stated at a meeting in Ottawa, that there are nearly a quarter of a million horses roaming the prairies of Saskatchewan which are usually referred to as "wild horses". These are farm horses which have been turned loose by their owners, who feel they have no use for them. There are so many of these horses now that they are becoming a problem, and according to an announcement on the radio recently, the Dominion Government is setting up a horse processing plant in Saskatchewan for the purpose of dealing with this quarter million head of unwanted horses. Much of the meat from these horses will be canned and sent to the liberated countries of Europe for human consumption.

An interesting side-light recently came to hand concerning the horse population of the United States. It is estimated that at present horses and mules represent about 55 percent of the total drawbar power of the United States. However, the 45 percent of tractor power works somewhat longer hours in the year and the total is believed to be almost evenly balanced between tractors and horses at the present time. Those responsible for these figures state also that colt production in the United States is not sufficient to maintain the present number of work animals. It seems, therefore, that the tractor is here to stay, probably not so much as a matter of preference on the part of horse loving farmers as a matter of necessity, because the tractor makes possible the accomplishment of much larger quantities of work per man hour used in the work than is possible with horses.

A middle-aged business man says he's in Class 5-B—Baldness, Bridgework, Bifocals, Bay-window, and Bunions.

How Small Breeders Can be Successful

by L. H. Hamilton

Recently I was asked the question, "Do you think we small breeders down here can ever amount to anything? Isn't the competition too keen?" This question might have been asked in any district in Canada or by a breeder of any class of livestock. To me it was an important question because it indicated a desire to achieve a greater measure of success and also because it indicated a lack of understanding as to how it could or should be done. It is not easy to answer satisfactorily. The variety of background, of experience and training in our farmer population and the climatic and soil conditions as well as many other factors which might be mentioned qualify, at least to some extent, the answer. Then there is the other side of the question, namely, how many are successful and how did they achieve their success? In speaking of live stock we are likely to take a lot of credit for the achievements of the past. We refer with pride to the change in type and the efficiency of our modern Shorthorn or the high milk production of our outstanding dairy cows, or the great distances we have gone in producing a uniform hog to meet our market demands for hog products; and we might go on and talk about the high egg production of certain hens or the achievements of certain sheep breeders. When this is all done, however, and we look at the overall result of these achievements we have less to be proud of. The average production of our livestock as a whole could be better. Four thousand pounds of milk per cow, or slightly over, is not high, in a country like Canada. We have perhaps less accurate figures on the efficiency of our beef cattle but we can look over the stock appearing on our markets, or the "would be" steaks served in our restaurants and feel we have not gone a great distance.

The Role of the Small Breeder

There are perhaps many reasons for this. Our markets have been uncertain, prices have not been satisfactory and our crops have been poor or good according to weather conditions. In fact there are so many of these factors that some people doubt if we can make comparisons with sufficient accuracy to be worth while. In spite of this however one cannot travel a great deal or talk with average farmers without becoming impressed with the great opportunity for improvement and the need for it. The small breeder is the backbone of the industry. He provides the market and the opportunity for the larger and more aggressive enterprise. He must farm intelligently and achieve a measure of success if the industry is to thrive with any class of stock. It is not strange therefore that we find the more outstanding live stock breeders in districts where the best livestock is being raised. Their influence is spread to their neighbours. Their breeding practices are being copied by the younger, more aggressive neigh-

bours. In some instances this has resulted in community enterprises being started.

Community enterprises have meant a great deal in the past and offer considerable possibilities for the future. I can think of several districts which are well known today because of such a venture. One breed of livestock was decided upon; high class bulls were purchased and a breeding programme was developed. In addition, the farm practice was studied and improved in the whole district and through a small amount of judicious advertising, saleable cattle were readily sold at satisfactory prices. There is much talk these days about community organization and community enterprise. In the case of purebred livestock I cannot think of any quicker or better way of raising our standards. It stimulates and helps the whole community without taking away the personal freedom to act. It is an attractive plan for the buyer since he can purchase a carload of cattle or more of similar type and breeding within a relatively small area. It encourages other community activities which help in the pooling of ideas and developing the available talent. It really develops men and this is the first step in developing animals. For success, small breeders should therefore organize and work together.

Planning is Important

The second point I would like to make is that success is the result of a well defined programme. Outstanding animals are seldom the result of guess work or accident. They are the result of a properly conceived breeding plan. Fads and fancies have assumed considerable importance from time to time and with different breeds of livestock but they have been short lived and harmful. The fundamentals must be adhered to. In Shorthorns the foundation of the breed is the female herd. Bulls have an important place but if the cow herd is not of the right kind success is still "around the corner". I know a young breeder who purchased a relatively high priced cow to serve as a foundation of his herd. This cow was sold in good condition and looked attractive but after she was on his farm a short time he did not require an expert to tell him she was not the best cow in his herd. She lacked in certain fundamentals which were not apparent to the amateur. She was later disposed of. There are perhaps differences of opinion among breeders as to the right type of cow. Personally I have always held that the most profitable type in the hands of the commercial breeder is the most desirable type. For instance, the average beef farmer wants a cow that will at least feed her calf, and some want more milk. The poor milker is not profitable even in a strictly beef herd. Fortunately in the Shorthorn breed the commercial value of the cow herd has always been emphasized. I visited

some months ago perhaps the best known herd of beef Shorthorns in Canada. I was impressed with many things; the number and quality of his bulls and the general organization of his farm but the thing that impressed me most lasting was his cow herd. There were some fifty in all, and what a wonderful group they were! Fifty uniform, low set, quality cows swinging big udders and in excellent condition. This is the kind of cows that make money on any man's farm no matter what kind of trade he carries on. This breeder attached great importance to his cow herd. He planned to keep most of his bull calves and therefore retained only those cows of sufficiently high quality to produce herd sires. This meant rigid culling and careful selection. This is perhaps the best place for the small breeder to start in any breeding programme. I was very interested in an article on culling which recently appeared in "The Milking Shorthorn Journal". It emphasized some of the practical difficulties encountered in culling a herd of cattle, such as preference, cost of certain individuals and lack of sufficient information. It is worth reading because it is so true to experience. The conclusions however were the same as have been stated before, namely, that one good cow takes less space and overhead than two poor ones. We have Shorthorns which are amazingly efficient. Unfortunately, we also have some animals registered under that name which are good for neither beef nor milk. It will take time and the concerted effort of every breeder to constantly weed out the tail-enders and cherish the best inheritance of our herds if we are to maintain the high position Shorthorns have held for quick gains, economical production and income producing ability.

Improvement Through the Sire

While the cow herd is the foundation, the herd sire is the quickest and best means of improvement. Finding and being able to buy the right kind of bull is the biggest problem for most small breeders. Everyone interested in pure bred live stock knows some herd which has become famous through the use of a particular bull. Not every one takes the time to learn the details of individuality and breeding behind such bulls. It is this individuality and ancestry which makes bulls valuable. How often when going about in search of a bull have we been asked "What breeding is the bull you are now using?" If it happens to be a popular line a new interest is established, while if it is just an ordinary line of breeding one may not even see the best bulls that are for sale. It is therefore important to have a breeding plan in mind and in this connection no one is more willing or able to be helpful than the well-established purebred breeder. Often times these purebred breeders have been criticised for selling poor individuals at high prices. This may have been true in some instances but it has not always been the fault of the seller. If one is following a hit or miss policy in breeding one must be prepared for both good and bad results. Even very good bulls will not always suit the average man's herd but

when a start has been made and certain lines of breeding established the successful breeder can be most helpful. He is the man who has the experience and background; those who have been in the business for a period of time, have a reputation to maintain, while the newer ones have one to make. They are always looking for future sales and therefore can be relied upon to give the best they have.

Intelligent Care Pays

The third point of importance is to keep purebred cattle in good condition. It is poor policy to pay high prices for breeding stock unless one is able to bring out the best qualities through proper care and feeding. Keeping animals in good condition does not necessarily mean that they should be fat. They should be thrifty and carry sufficient bloom to be attractive. They should also be well halter-broken so they can be handled easily. An animal which is shy or afraid never shows itself well and never makes as good an appeal as it should. On the other hand well cared for and well trained animals often look better than they really are.

To round out the programme one should plan to advertise. This does not necessarily mean carrying large advertisements in farm and breed journals, valuable as that is. It means presenting an attractive picture to visitors. Having the grounds and buildings attractive and in a good state of repair. Having the stables, paddocks and fences neat and having unnecessary implements and equipment put away in their proper place. An air of neatness and prosperity is not very costly, but it is necessary. Further advertising can be done at home through a knowledge of the animals and their pedigrees. In this connection pictures are an asset. A good photograph or snap shot of a distant animal in the pedigree often helps to promote a sale and after all, that is the business. One may have wonderful animals of excellent breeding but they must be shown and advertised to be appreciated. Take part in at least the local show and help to organize sales.

Shows and sales help to establish values. Good animals always bring a good price. You will appreciate your animals more when the stamp of public approval is placed on them. Advertising in this way has a further advantage. It keeps the small breeder informed. New lines of breeding and new breeders are always coming forward. This is how improvement is brought about. Because of this, values change. The progressive breeder must be aware of these changes if he hopes to establish a reputation for his cattle and be of service to the industry. At present, there is not a sufficient number of the right kind of purebreds. Sound planning on a cooperative basis and intelligent operation provides a foundation for success.

Grandmother surveyed the new dress her granddaughter had just donned, with considerable disdain and disgust. The modern young miss noted the apparent disapproval and inquired, "Grandmother, dear, when you were my age didn't you set your cap for granddaddy?"

"Of course I did," replied grandmother, "but it wasn't my knee cap."

Troubles in the Hog-House

by J. E. Lattimer

The pig may always be depended upon for getting into the limelight. It seems impossible to prevent him from being front-page news. Possibly, it is because the pig is such an unpredictable poser. He may generally be depended upon to do the wrong thing. He even comes to market in too great numbers sometimes and too few at other times.

This lack of co-operation on the part of the pig may be due in some degree to the nature of the animal. A greased pig that was to have contributed to the fun of sports day confounded his would-be pursuers for a time by just standing and regarding them philosophically. This may have been a more sophisticated pig than the ordinary specimen of the species.

There is a steadfastness of purpose common to the pig that accounts for some of the surprising results. We hear much about the danger of swapping horses while crossing a stream. The pig, however, refuses to change his mind or direction or speed when in the middle of the road with a car coming toward him. This tendency to take things head-on, regardless, need not be elaborated on to those who have had the experience of having pigs escape between their legs when endeavouring to avoid captivity.

This steadfastness of purpose when taken together with other characteristics of the animal, may be directed to profitable channels. The pig has great capacity to convert various, sometimes unsaleable, products into meat. This, together with prolificacy or fecundity makes the pig a resourceful machine in getting rid of grain surpluses.

The prolificacy of the pig is by no means universally appreciated. It is said that in Northern Ireland, where the constabulary are used in securing the yearly report of animals on farms, that one constable, when told that a matronly brood sow had a litter of a full dozen, refused to have such an improbable tale put over on him. How useless it would have been to have insisted that, provided with the proper environment, this could occur twice a

year! If our constable, confronted with such a claim, had survived apoplexy — which is doubtful — he would only have been the more certain that he was being imposed on. If this story had been told of people who held pigs in less esteem it would be more understandable, but we have been under the impression that the Irish were more familiar with pigs than even some other people of the British Isles.

British Know Their Bacon

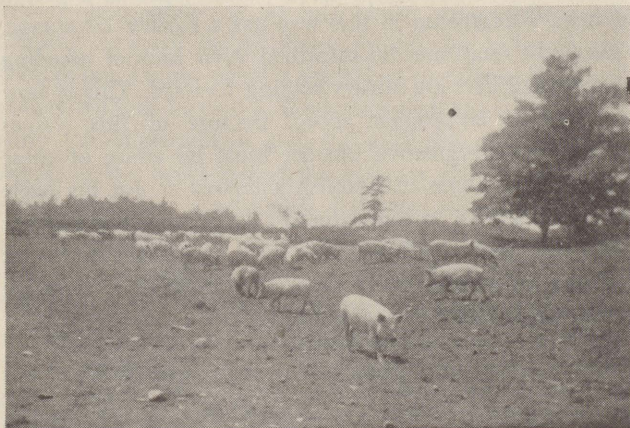
The British know their bacon even better than they know their pigs. This is understandable, as in normal time the bulk of the bacon consumed in Britain is imported. But it is imported from countries that have depended, not only on foundation breeding stock, but also on methods of cure originally carried on in Britain. Hence the standard import is a "Wiltshire Side". The wiltshire side includes not only the side meat, which has almost the monopoly of the bacon business locally, but also the back bacon usually consumed in the local market as pork chops. The preferred weight of wiltshire sides is from 55 to 65 pounds. Weights either under or over these "sizable" classes bring a lower price in the market. There are other exacting conditions, including conformation, firmness of flesh and proportion of lean meat to fat, that are important in reaching the desirable grade. Weight alone is, however, a pretty fair assurance getting good quality for the reason that the preferred weights are reached by a pig of about 6 months of age; that is, about half grown. Coming within these desired weights is practically a guarantee of youth. Youth is a quality that is recognized in most markets when applied to meat of any kind, whether beef, poultry or pork products.

Catering to the British bacon market necessitates two crops of hogs yearly. This is the necessary technique in raising hogs where "Wiltshire Sides" for disposal in the British market is the goal.

Discrimination in regard to weight is the common sense method of securing the best quality. It makes certain that sides of preferred weight must come from youthful half-grown hogs.

The prolificacy of the pig, together with the practice of using him at a comparatively tender age, makes it possible and necessary to secure two crops a year, and these crops may be fairly large with only a small proportion of breeding stock. Yet, even with this possibility, a certain proportion of the animals come to maturity in size while being used to reproduce their kind. These mature animals do not make Wiltshire Sites. They are overweight. By excluding all overweight hogs by the simple method of meticulous care in regard to weight, a quality product is made more certain.

This is superb business generalship. The high strategy of the whole campaign is practically above criticism. It is made possible by the British consumer's willingness to trade with other peoples.



Some of the 1500 pigs fed by a Nova Scotia apple grower as a worthy contribution to the war effort. These pigs were fed on Western grain.

In normal times there has been keen competition among many nations to supply "Wiltshire Sides" for the British breakfast. Denmark and Holland have been in the business for some time. Yet, in the 'thirties there were many other countries anxious to share this trade. In 1932 imports of bacon and hams into Britain amounted to over 12 million cwt. This being translated (at 112 pounds per cwt.) amounts to over 1,365 million pounds. This is almost twice the amount that it is expected Canada will send to Britain in 1944, estimated at 700,000,000 pounds.

The European countries furnishing the 1932 imports comprised a lengthy list. In order of importance they were as follows:

Denmark	7,676,741 cwt.
Poland	1,252,780 "
Netherlands	977,074 "
United States	520,096 "
Lithuania	512,007 "
Sweden	423,670 "
Canada	324,447 "
Irish Free State	214,837 "
Argentina	88,645 "
Estonia	82,032 "
Finland	38,203 "
Latvia	18,795 "
Germany	1,588 "
Norway	203 "
Other Empire countries	1,084 "
Other Foreign countries	7,503 "
SUMMARY	
Total Empire Countries	541,268 cwt.
Total Foreign Countries	11,650,920 "

TOTAL 12,192,188

As may be noted from this record, Canada took only a small part in supplying bacon to Britain in 1932. This was not due to any lack of advice or admonition on the part of farm leaders. In fact, Canadian farmers have become somewhat "fed up" with the example of Denmark. At any rate, the Canadian hog feeder was quite willing to let Denmark, or any other European country, feed the hogs in 1932 when the weighted average price at all markets averaged \$3.95 per hundred, live-weight.

The British farmer was also anxious at that time for a higher price. The only way to make certain of ensuring this was the introduction of quota arrangement for imports. This was done, and while Denmark received preferential treatment, Canada was granted a quota of 250,000,000 pounds, or just about one-third the quantity that it is expected will be sent there this year.

Quota restrictions on imports from European countries necessitated control of production in some of those countries. Both Denmark and Holland claimed to have achieved a certain degree of birth control of pigs in the prewar period.

The policy of Britain designed to help the British farmer was indirectly responsible for raising pig prices, not only in Britain, but also in Denmark and Canada in the later 'thirties. That policy has borne excellent fruit in the war years, as it helped to establish on a firm foundation an alternative source of supply so badly needed when Denmark was over-run in the early war years.

Department Will Pay Transportation on Liming Materials

To help farmers whose land needs liming, the Field Husbandry Branch will help pay transportation charges on liming materials bought.

The materials must conform to the following specifications: Crushed Limestone, to contain a minimum of 85% of calcium carbonate, so ground that all the product will pass through a 10-mesh screen, and 30% will pass through a 50-mesh screen. The selling price, not including packing and hauling costs, must not be more than \$2.00 per ton.

For carload lots of 30 tons or more the Department will pay an allowance equal to the transportation charges, according to the reduced tariff, up to a total of \$1.30 per ton. If transportation charges exceed this amount, an additional allowance equal to half the excess, up to a total allowance of \$1.50 per ton, will be paid.

Shipments must be full carloads of 30 tons or more and must be accompanied by a delivery permit for each full car. Total transportation charges will be paid by the seller, who will collect the rebate from the Department.

In the case of shipments by truck, the allowance is 5 cents per ton mile from the quarry to the farm, up to a total of \$1.50 per ton. This is payable either to the farmer or to the carter.

In districts where the limestone has to be made by rail from the quarry to the nearest railroad station and by truck from the station to the farm, the Department will pay, starting from the 6th mile from the station and in addition to the transportation by railroad, 5 cents per ton mile up to 30 miles.

SOIL CONSERVATION . . . (Continued from page 1)

fields where the fertility has been depleted to the extent that in their present condition they are quite unprofitable for cropping. Whole areas in some counties have been taken over by poverty grass — a sure sign of the danger line in fertility. Not the least deplorable evidence is the destruction of the farm woodlot. Stripping hard and soft woods alike from the high rolling and often rocky terrain simply spells trouble which is not even of the future but actually right on our doorsteps. Farm management practices are hastening our loss of topsoil. Plowing up and down sloping fields provides the best means in the world for the development of gullies and soil loss. The contrast is very strong in fields recently taken from the bush and which have not been subjected to man's wasteful cultural practice.

The need for some such plan as that adopted by the U.S. Soil Con. Service is urgent in Canada. Our agricultural authorities could find no more worth while undertaking, or one that would contribute a greater benefit to agriculture as a whole.



DEPARTMENT OF AGRICULTURE

Activities, Plans and Policies of the Quebec

Department of Agriculture

Varieties of Farm Crops Recommended By the Quebec Seed Board for 1945

The Quebec Seed Board is a small body of men interested in agriculture, whose function it is to study the needs of the Province and to advise as to how the most satisfactory supplies of seed of the best varieties may be made available.

In most classes of farm crops there are many varieties which differ widely in yield, quality and adaptability. Only a very few are best suited to any part of the country. A committee of the Seed Board recommends each year the best varieties, and its recommendations for 1945 are given below.

From the standpoint of efficiency in multiplying, distributing and marketing of seed, it is desirable to restrict the number of varieties as much as possible. However, different conditions prevail in different parts of Quebec and the different purposes for which the several crops are used make it impossible to confine recommendations to only one variety.

In most cases the varieties which appear on the list have been thoroughly tested against many other available varieties and as the result of such comparisons have been chosen as being the most recommendable.

GRAIN CROPS

OATS:

Early Maturing:

Cartier:—Very good quality, good yield.

Mabel:—Very good quality, good yield, resistant to leaf rust.

Medium Maturing:—(4 to 7 days later than early group).

Erbau:—Good quality, good yield, resistant to leaf rust.

Vanguard:—Good yield, resistant to leaf rust.

Medium to late Maturing:—(8 to 12 days later than early group).

Banner:—Good yield, generally adapted.

Lasalle:—Very good quality, good yield. Partially resistant to stem rust. As it produces well under dry conditions, it is especially adapted in the general district of Montreal.

Roxton:—Very good yield and quality, partially resistant to stem rust and definitely more resistant to leaf rust than the other varieties recommended.

BARLEY:

Rough-Awned Varieties:

O.A.C. 21:—Six-rowed, early, good yield, especially recommended for malting.

Pontiac:—Six-rowed, about two days later than O.A.C. 21, good yield, good straw and generally adapted.

Smooth-Awned Varieties:

Byng:—Six-rowed, early, excellent yield. (Not recommended on very rich soil where the crop is apt to lodge).

Velvet:—Six-rowed, early and good yield.

WHEAT:

Coronation II:—Bearded, white-chaff, late maturing, good for breadmaking, resistant to rust.

Garnet:—Beardless, very early maturing, and good for breadmaking.

BUCKWHEAT:

Japanese:—Smooth hull, large seed with vigorous growth.

Rough-Hull:—Very small seed, rough hull, suitable for feeding purposes only.

Silverhull:—Smooth hull, small seed.

FIELD PEAS:

Arthur:—Medium maturity, medium size, short straw, suitable for grain and for soup.

Chancellor:—Early, small size, medium length of straw, suitable for grain, for O.P.V. mixtures, and for soup.

FIELD BEANS:

Improved Yellow Eye:—Early, very large seed, with yellow eye. Suitable for table use where there is no objection to the yellow eye.

Corvette:—Early, large white seed, suitable for table use.

Michelite:—Late, small white seed, suitable for table use.

Robust:—Later, small seed, good yield, suitable for table use.

FIBRE FLAX:

Liral Dominion:—A new variety developed in Northern Ireland which has given particularly fine results in Canada. The variety is tall and of a particularly vigorous habit.

Stormont Cirrus:—Rather late, very long and strong straw, very good yield of fibre and a fair yield of seed. The quality and strength of straw place this variety among the best.

Stormont Gossamer:—Late, long straw, rather weak. Good yield of fibre and very good yield of seed. The fibre is of good quality and this variety ranks with Cirrus as one of the best.

GRAIN MIXTURES

Under some conditions it may be desirable to grow mixtures of grain. When this is done it is important that the varieties used should ripen at the same time. They should be chosen from those that are recommended for the different districts.

EARLY MIXTURES:

Cartier or Mabel	Rate per acre 50 lbs.
Any variety of barley on the recommended list	50 lbs.

MEDIUM MATURING MIXTURES:

Erbau or Vanguard	Rate per acre 50 lbs.
Any varieties of barley on the recommended list	50 lbs.

MEDIUM TO LATE MATURING MIXTURES:

The later varieties of oats Banner and Lasalle may be mixed with any of the recommended barley varieties at the same rates as above, but as all of these ripen ahead of the oats there is a likelihood of considerable loss.

As the Seeds Act does not provide for seed grain mixtures, those recommended cannot be purchased. It is therefore necessary each year, to make up the mixture at home by using the proper varieties, proportions and rates.

CORN CROPS

ENSILAGE VARIETIES:

OPEN-POLLINATED:

Salzers (North Dakota):—An eight-row, white flint, early maturing.

Golden Glow:—A fourteen to sixteen-row dent, medium maturing.

Silver King (Wis. No. 7):—A fourteen to sixteen-row white dent, medium to late-maturing.

HYBRIDS:—

Varietal Hybrid:

Algonquin:—This is a varietal hybrid. The seed sold is a light yellow colour but the crop grown produces ears with

a mixture of yellow and white kernels. The variety is very early maturing.

Double-Cross Hybrids:

Can. 531.—This is a double-cross hybrid. It is a yellow dent variety giving ears with fourteen to sixteen rows. It is early maturing.

Can. 606.—This is a double-cross hybrid. It is a yellow dent variety giving ears with fourteen to sixteen rows. It is medium maturing.

Can. 240.—This is a double-cross hybrid. It is a yellow dent variety giving ears with fourteen to sixteen rows. It is very early maturing.

GRAIN VARIETIES:

Quebec No. 28.—A twelve-row yellow flint, early maturing.

HAY AND PASTURE CROPS

RED CLOVER:

Dollar.—An early variety which is hardy, high yielding and disease resistant and which will produce two cuts per season. It has been selected from material grown at Macdonald College since 1911 and is well adapted to local conditions.

Ottawa.—An early variety which is hardy, a good yielder, hairy-stemmed, dark seeded and resistant and produces two cuts per season. It was developed by mass selection methods at the Central Experimental Farm, Ottawa.

ALFALFA:

1st Choice.—Registered Grimm.

2nd Choice.—Certified Grimm or Certified Ontario Variegated.

MIXTURES FOR HAY

Mixture "A"

For well drained, non-acid soils

	Rate per 100 lbs.
Timothy	50
Red Clover	20
Alsike Clover	5
Alfalfa	25
	100 lbs.

Rate of Seeding:—13 lbs. per arpent
16 lbs. per acre

Mixture "B" (*)

For soils, not well-drained

	Rate per 100 lbs.
Timothy	55
Red Clover	30
Alsike Clover	15
	100 lbs.

Rate of Seeding:—13 lbs. per arpent
16 lbs. per acre

(*) Add two pounds of Alfalfa per arpent where conditions appear satisfactory for a trial with this crop.

MIXTURE FOR HAY AND PASTURE

Before using any of the three following mixtures for pasture purposes, study carefully the recommendations of the Quebec Provincial Pasture Committee. These are available from any of the provincial agricultural offices.

Mixture "C" (*)

For soils inclined to be acid.

	Rate per 100 lbs.
Timothy	47
Red Clover	20
Alsike Clover	13
Kentucky Blue	13
Red Top	7
	100 lbs.

Rate of Seeding:—12 lbs. per arpent
15 lbs. per acre

Mixture "D"

For well-drained, non-acid soils.

	Rate per 100 lbs.
Timothy	48
Red Clover	15
Alsike Clover	8
Alfalfa	16
Kentucky Blue	13
	100 lbs.

Rate of Seeding:—13 lbs. per arpent
16 lbs. per acre

(*) Add one pound of Wild White Clover per acre where it does not volunteer readily from the soil.

LONG TERM PASTURE MIXTURE (*)

	Rate per 100 lbs.
Timothy	35
Red Clover	20
Alsike Clover	10
Kentucky Blue	15
Red Top	15
Wild White Clover	5
	100 lbs.

Rate of Seeding:—16 lbs. per arpent
20 lbs. per acre

(*) It is recommended that this mixture be seeded with three bushels of oats per acre and that it be grazed the same year, as soon and as often as the oats reach a height of six inches. On heavy, wet land, however, it may be better to sow the mixture and nurse crop in the spring and harvest the oats when ripe, or to sow the mixture alone in mid-summer. It should not be grazed too short during the first year, especially in September.

ROOT CROPS

In the following list of root crop varieties, all of the swede and mangel sorts are registrable. The Board recommends the use of registered seed. Experience has shown clearly that ordinary commercial seed cannot be depended on for quality, uniformity or trueness to type. In contrast, the registered material is being constantly selected and is being grown and packaged under strict supervision. It therefore represents the highest grade of root seed available and, while it will cost more, the results will justify the extra expenditure:

SWEDES:

Acadia.—A globe-type with purple skin colour. Bred and introduced by the Experimental Farm, Ottawa.

Ditmar's Bronze-Top.—A flat-globe type with green to bronze skin colour. Selected by Mr. R. V. Ditmars of Deep Brook, N.S.

Laurentian.—Globe to slightly longer than globe-type with clear purple skin colour. Bred and introduced by the Agronomy Department, Macdonald College, Que.

Wilhelmburger.—Globe-type, with green skin colour. Introduced from Europe. Recommended as possessing resistance to club-root.

MANGELS:

Frontenac.—Intermediate, of orange-yellow colour. High in yield and medium in dry matter. Bred and introduced by the Agronomy Department, Macdonald College, Que.

Giant White Sugar.—Half-long, white, rather low in dry matter. Bred and introduced by Ralph Moore, Norwich, Ont.

Prince.—Half-long, white, low in dry matter, high gross yield. Selected by R. Moase, Annan, P.E.I.

Tip Top.—A short intermediate, of orange-yellow colour high in dry matter. Bred and introduced by the Experimental Farm, Ottawa.

CARROTS:

Giant White Belgian.—Very long type, slim, grows one-third out of ground.

White intermediate.—Intermediate, grows entirely under-ground.

POTATOES:

Irish Cobbler.—White, good quality, especially suitable for an early crop.

Green Mountain.—White, good quality, suitable for main crop, on light soils.

The arithmetic class was learning weights and measures.

"What does milk come in?" asked the teacher.

"In pints," ventured Betty.

"And what else?"

"I know," shouted Johnny, who had spent the past summer on the farm, "in squirts."

A tramp lay in a ditch dozing in the sun and covered with flies; then a wasp got in among them and stung him. "Come on," he roared, sweeping them off, "you'll all have to get off now."

"While the earth remaineth, seedtime and

Farmers know, maybe better than a lot of other people, what it means to invest both time and money. Plowing, harrowing, seeding—and then waiting while sun and rain and the good earth produce a bountiful crop—surely that is one of the biggest investments of all. And it has been going on for thousands of years!

So it is not strange that farmers know the value of Victory Bonds as an investment, too. Savings "Sown" in Victory Bonds are safe beyond doubt—they earn twice as much interest as money in the bank—and they are backed by Canada's promise to repay, at maturity, every dollar—in full.



harvest... shall not cease."



GET READY TO BUY

VICTORY BONDS

8TH VICTORY LOAN OPENS APRIL 23RD

NATIONAL WAR FINANCE COMMITTEE

Ayrshire Breeders Hold Annual Meeting

The seventy-fifth annual meeting of the Canadian Ayrshire Breeders' Association was held in Montreal on February 27th with provincial clubs from every province in the Dominion represented.

President Beauchemin, presiding at the various sessions of the meeting and at the annual banquet in the evening, was gratified at the large attendance, and reported a good year for the breed during 1944 which, he pointed out, continues to progress very satisfactorily. He urged continuance of this progress in the years to come, emphasizing that this could only be made if breeders continued to use only the best possible sires and dams.

The financial position of the Association continues sound; so much so that representations were made from the floor that more of the Association's money should be put into circulation for advertising the breed and for examining fresh avenues of progress. It was urged on the incoming board of directors that a careful study of the budget be made to eliminate all unnecessary items of expense wherever possible, and that thought be given to the initiation of new policies which would be of greater benefit to breeders and the breed as a whole.

The report of the type classification committee, consisting of Messrs. Biggs, Raithby, Chagnon, Ness, Toupin and Napier showed that since the adoption of herd classification two years ago 82 herds had been classified, 39 in 1944. During the past year 924 head were judged by the inspectors. It was gratifying to note the high percentage (80%) of cows in the top three classes. Of the cows classified last year.

- 12% were rated excellent
- 32.9% were rated very good
- 35.3% were rated good plus
- 17.4% were rated good
- 2.3% were rated fair
- 0.1% were rated poor

The committee made two trips to the United States during the year to study the methods and techniques of the American Ayrshire Association in herd classification, and

found little difference between the work of the American inspectors as compared with ours. Tribute was paid to the excellent work done by the Canadian inspectors during the course of the year.

The special committee on R.O.P, consisting of Messrs. Chagnon, Ness, Pelletier, Biggs, B. Ness, Toupin, Napier and Raithby, also visited the United States to see how R.O.P. work was handled there, and found that their system of keeping records made it possible for pertinent information to be much more easily available to breeders in general than ours. The committee recommended that farmers making application be required to put and keep all their animals on test, with the exception of nurse cows and 100,000 pound cows, and recommended the one-day test with monthly visits by the inspector as soon as labour conditions permit. It was also suggested that farmers be relieved of the duty of making reports of entries of cows on test, this information to be obtained by the inspector from the barn sheets. It was hoped that these recommendations would be agreed to by the other breed associations so that a uniform policy could be adopted as soon as possible.

Gilbert McMillan reported on the Regina meeting of the Dairy Farmers of Canada; a report of this was carried in last month's issue of the *Journal*. Due to lack of time at the meeting, individual reports from directors of the different provincial associations were dispensed with, but will be published in the *Review*. Appointment of representatives to fair boards and of judges to exhibitions was left to the discretion of the board of directors.

The main talk of the meeting was given by C. F. Conklin, Secretary of the American Ayrshire Breeders' Association, who foresaw a brighter future for the dairying industry than for any other branch of livestock rearing. The industry, he thought, would sooner or later, through the introduction of more and more mechanization, be completely revolutionized and predicted that throughout the world, the livestock population as a whole will decline. This means that, in order to maintain necessary production,



C. T. Conklin brings a message to the delegates. Beside him are Frank Napier and J. P. Beauchemin.



The guests enjoyed food and entertainment at the banquet.



Voting for directors is by secret ballot. Here the scrutineers record the votes.

the already high quality of the breed must be still further increased and this means better and better breeding stock. He also urged that every effort be made to interest young people in the Ayrshire breed which, he claims, is the dairy breed *par excellence*.

Donald Cumming of Lancaster, Ont. will be the next president, and directors elected from Quebec for the next two years were W. Erskine Rodger, P. D. McArthur, Douglas Ness, Gustave Toupin, J. R. Pelletier and J. P. Beauchemin.

A feature of the day's meeting was the conferring of honorary life memberships in the Association on C. T. Conklin and H. Chisholm, Strathglass Farm, Port Chester, N.Y.

Help Given to Farmers Short of Hay

During the course of the current year the Department of Agriculture has spent some \$100,000 for transportation charges on hay shipped in to those parts of the province, particularly the northern sections, where the hay crop was short last season. Special freight rates accorded by the railway companies made it possible for the Department to supply hay to all farmers who needed it. This hay was brought in from the other provinces of the Dominion where the supply was ample.

With respect to the recent Federal policy of prohibiting export of hay to the United States, the Department points out that this action was not requested by Quebec.

Linen Mills for Quebec?

"Quebec should have its own flax weaving mills," said Gaston Morazain, flax specialist for the Cooperative Federee at a meeting of the Montreal-North Cooperators recently. We grow as good flax as any other country, and after the war foreign weaving plants will want our fibre to keep their factories going. These outlets for our raw product would be interesting, but we could do better by doing the weaving ourselves. We must prepare now and organize our own weaving plants here to process the flax we grow."

With this object in view it was voted at the annual meeting of the Montreal North Flax Cooperative to set aside a reserve of one dollar per acre of flax grown, these funds to be deposited with the Federee to be used eventually for the organization of a weaving mill. Several other groups have decided to do the same.

Farm Labour Bureau Appointment

An assistant-director of the Farm Labour Bureau has been appointed in the person of François Boulais, who will act as assistant to Mr. Alex. Rioux in the Montreal office of the Bureau, 30 St. James St.

Mr. Boulais is a graduate of Oka. For a few months after graduating with his degree he worked on a farm in Rouville county, then accepted a position as fieldman for the Canadian Ayrshire Breeders' Association. In 1938 he became an instructor in the agricultural school at St. Croix, and later taught at Ste. Martine until 1941, when he was made supervisor of young farmers' clubs for the Montreal South District, a position he occupied until his recent appointment.

Livestock Breeders Will Meet in April

The fiftieth annual meeting of the Quebec Livestock Breeders' Association will be held in Quebec on April 10, 11 and 12.

As well as being the fiftieth anniversary of the formation of the Association, this meeting will also mark the fiftieth anniversary of four of the member organizations: the Hog Raisers' Society, the Sheep Raisers' Society and the Canadian Cattle and the Canadian Horse Breeders' Societies.

New Agronome in Montmorency County

Mr. J. C. Pelletier, B.S.A. has been appointed county agronome for Montmorency, succeeding the late A. P. Pelletier. His headquarters will be at l'Ange Gardien.

A graduate of Ste. Anne de la Pocatiere, Mr. Pelletier has been assistant agronome at Charlesbourg, agronome at Normandin and has been in charge of farm competitions in the north-eastern area of the province since 1940.

Some seed wheat which I dressed last season was not used. Can I use it this season, and, if so, ought it to be re-dressed? It certainly ought to have a clean change of underwear.



CO-OPERATION AND MARKETING

A page of interest to members of farmers' co-operatives

Dominion Co-operative Law Asked

Ontario Brief Asks Definition of Co-operatives

The Royal Commission on taxation of co-operatives under Justice Errol M. McDougall, has now completed its sittings, having visited in turn Vancouver, Edmonton, Calgary, Regina, Winnipeg, Toronto, Ottawa, Montreal, Quebec, Moncton and Halifax. Its report is being eagerly awaited.

Among many briefs presented was an outstanding one — by the Ontario Co-operative Union, which said in part.

"For obvious reasons of business safety, co-operatives must maintain a margin between cost and selling price and, in order to avoid a price war between co-operatives and others engaged in the same business, the practice is to conform to the custom of the particular trade.

It is clear, however, that the margin is not an income to the co-operative but results merely from its particular method of doing business. The co-operative does not exist for the purpose of creating the margin; the margin is a temporary financial safety device set up by the members and returnable to them.

A marketing co-operative, or a farm supply co-operative is essentially part of the equipment of the farm and

just as a threshing outfit, or a tractor, or a combine, may be jointly owned by two or more farmers, and its use jointly shared, so may a grain elevator, a poultry or livestock marketing association, or a farm supply society, be jointly owned, co-operatively used and the savings it effects shared by those establishing the service."

The brief asked (1) that a proper definition of a co-operative be inserted in the Income Tax War Act and Excess Profits Tax Act;

(2) That provision be made for the incorporation of co-operatives under Dominion law;

(3) That, recognizing the great social benefits of co-operatives and that the patronage refund is not income in any true sense, all co-operatives be exempt from the payment of income tax and excess profits tax, by statute, on patronage returns;

(4) That co-operatives, including credit unions, be excluded from the provisions of section 92 of the Income War Tax Act and not be obliged to deduct tax at the source on dividends.

Federee Annual Meeting Hears Good Reports

Delegates thronged the twenty-third annual re-union of the Co-opérative Fédérée on February 22-23 and scores were unable to secure seats for the annual dinner which celebrated a banner year for this growing organization.

With a business turn-over of \$38,500,000 and an addition of 84 new societies to its roll the Co-opérative Fédérée has shown remarkable development in the year 1944. Patronage dividends were announced of $\frac{3}{16}$ cents per pound on butter; $\frac{5}{32}$ cents on cheese; $2\frac{1}{2}\%$ on grain; 4% on balanced rations; 4% on chemical fertilizers; 5% on insecticides, tile drains, metal roofing, fruit packing materials, binder twine; 1 cent per dozen on eggs; 2 cents per bag of 75 pounds of table potatoes received on consignment and 1% on flax.

Co-operatives Should Work Together

At the annual dinner, presided over by J. A. Pinsonneault, President of the Board of Directors, the guest speaker was Prof. F. A. Angers of the Commercial High School. Prof. Angers set forth three values in co-operatives.

First — They give man confidence in himself. As M. M. Coady says — they help men to be "Masters of their own destiny."

Second — Co-operatives give men an opportunity to

participate in the management of their own and their countries' affairs.

Third — They give them a larger economic share in what they produce.

The speaker warned that co-operation is not a panacea and urged his hearers that in the face of rising opposition it was not enough to be good individual members of a local cooperative, they must be willing to co-operate with other co-operatives in meeting the needs of the people on a wide front.

In the election of officers, H. C. Bois continues as President and General Manager, with Romeo Martin as Secretary.

Cooperation in Nova Scotia

The Canadian people have always had a flair for co-operation, especially in Nova Scotia. This may be because our pioneer ancestors could never have survived unless they had developed a neighbourliness which virtually amounted to co-operation. At any rate the co-operative movement started in Canada not very long after it did in England a century ago.

Housing is now the latest venture. Of course the best known project would be among the miners of Nova Scotia,

who also have to their credit one of the earliest and most successful co-operative stores on this continent. Already half a dozen housing projects have been completed in Cape Breton Island.

The men worked at their own homes, and helped their neighbours build theirs. The first project was eleven houses on a 28-acre piece of land, each house having $\frac{3}{4}$ of an acre. The Provincial Housing Commission advanced 75% of the money needed, and the rest came from the local credit unions. Houses valued at \$2,500 were built for \$1,850, and rented out at \$12.50 a month to the members of the co-operative who helped build them. This rental money takes care of amortization, depreciation, interest at 3% and repairs.

Normandin Co-op Starts Tenth Year

With 1945, the Co-operative Society of Normandin is setting out on its 10th operating year. Starting with a membership of 28 in 1935, it is now 133 strong. The Balance Sheet for 1944, was presented to the members at their annual meeting of January 31st last. The society's business has made considerable progress: from \$292,-674.55 in 1943, figures for 1944 are \$410,298.66 an increase of \$117,624.11. This higher showing has manifested itself in all departments: cheese, \$2,580.94; storage: \$41,004.21; flour and gristmill — \$2,580.94. Livestock sales topped last year's record by a net profit of \$10,011.27 through the consignment of \$64,734.74.

Since its establishment, the Normandin Co-operative has had a business turn-over of \$1,569,480. with a total net profit of \$37,090.86.

Drift From The Farm

In 1921, says the Dominion Bureau of Statistics, 38 of every 100 Canadian working men were farmers; by 1941 the proportion had fallen to 32. This is the first time in the history of Canada that farmers have formed less than a third of the working population.

Get the Right "B" Mixture

Certain forage seed is being offered for sale under the name "B mixture" which is quite unsuitable for use, and farmers are warned by the Field Husbandry Service to be on their guard against it.

The true "B" mixture as recommended by the Provincial Seed Board consists of 55% timothy, 30% red clover and 15% alsike clover and sells for around 22 cents per pound. The false "B" mixture which is being offered in some parts of the province has a lower clover content.

If purchasers will take the time to read the labels on the bags they will be able to know what they are buying. The false "B" mixture sells at a lower price, but sale price is not the only item to be considered in buying seed: quality should come first. In seed, as in anything else, anything labelled "cheap" is really more expensive in the long run.

Market Comments

Prices of farm products remain fairly uniform. Two outstanding exceptions to this rule in live stock occurred during the past month. One was the rise in the price of lambs, specially the common grade, and the other was the advance in the price of sows.

The rise in lamb prices was due to the exports to the United States, which from January 1st, to February 22nd, numbered 26,252. The rise in price of sows is a reflection of the decline in hog marketing that has taken place as compared with the previous year. These two price changes warrant a comparison of the numbers of live stock coming to market.

The first 7 weeks of the calendar year has recorded a great expansion in inspected slaughter of live stock with the exception of hogs. Inspected slaughter of cattle for the first 7 weeks is up over 50 percent, calves over 20 and sheep and lambs 4, while hogs were down 30 percent for that period. The decrease in the number of sows marketed during the period was over 40 percent. This indicates that the liquidation of breeding sows has run its course and hog marketing, for this calendar year, may be near the 1943 number, rather than the volume of 1944. The 1943 output was about double that of 1939.

An interesting item in potato prices is a note that 10 cents less per bag may be deducted if shipped in old sacks. The spread in potato prices has been wide this year depending on grade and condition. Potatoes are not just potatoes, but have been priced from \$1.20 to \$1.90 per 75 lb. bag on the same day at the same market according to quality.

Trend of Prices

	Feb. 1944	Jan. 1945	Feb. 1945
	\$	\$	\$
LIVE STOCK:			
Steers, good, per cwt.....	12.18	12.13	12.28
Cows, good, per cwt.	8.62	8.75	8.90
Cows, common, per cwt.	6.73	6.40	6.67
Canners and Cutters, per cwt.	5.33	5.05	5.50
Veal, good and choice, per cwt.	15.25	15.25	15.80
Veal, common, per cwt.....	14.18	12.77	14.48
Lambs, good, per cwt.....	11.42	12.77	12.50
Lambs, common, per cwt.....	14.18	6.11	9.20
Bacon hogs B.1 dressed, per cwt.	17.15	17.75	17.73
ANIMAL PRODUCTS:			
Butter, per lb.	0.35	0.35	0.35
Cheese, per lb.	0.21	0.21	0.21
Eggs, grade A, large, per doz.	0.37	0.35½	0.35½
Chickens, live, 5 lb. plus, per lb.	0.27	0.27	0.28½
Chickens, dressed, milk fed A, per lb.	0.35	0.35	0.36
FRUITS AND VEGETABLES:			
Apples, B.C. McIntosh, extra fancy, per box	3.70	3.50	3.25-3.75
Potatoes, Quebec No. 1, per 75 lb. bag	1.70-1.75	1.70-1.75	1.60-1.75
FEED:			
Bran, per ton	29.00	29.00	29.00



THE WOMEN'S INSTITUTES SECTION

*Devoted to the activities of the Quebec Institutes
and to matters of interest to them*

Family Allowances

by Agnes L. Patterson

A subject of much heated discussion for the last few months has been that of Family Allowances. Last July the Dominion Government passed the Family Allowance Act, to come into effect on July 1, 1945. Under this Act the Government will pay to children in Canada up to five years of age, five dollars per month; from six to nine years, six dollars per month; from ten to twelve years, seven dollars per month; and from thirteen to fifteen years, eight dollars per month. The total payment made to any one family is reduced by one dollar per month for the fifth child, by two dollars for the sixth child, and also the seventh; and by three dollars per month for the eighth and every successive child.

The monthly allowance is to be paid to the head of the household, and will not be paid for any child who is physically able to attend school or receive similar training and is not doing so. The Act does not cover Canadian children of Indian parentage.

Since the passing of the Act almost every periodical that possesses a reader's page has contained letters from citizens all across Canada, either upholding or condemning the Act — the greater number condemning. Before passing judgment on this question, as in other questions, it is wise to consider a few of the facts behind the passing of the Act — why the Government considered it wise to do so.

First of all, Canada is not the first country to take this step. The need for Family Allowances was recognized as far back as 1920, and to-day some thirty or more countries have allowances of some kind or another.

The main object behind Family Allowances is for every child to have at least the necessities of life — sufficient food, shelter and clothing, and an education. While it costs more to raise a family of seven than a family of two, the

father of seven, just because he has a larger family, cannot command a higher wage than the father of two children. Men in the higher income brackets have been receiving deduction from income tax for their children. Family Allowances will take the place of this for the poor wage earner, while deductions from income tax for the rich man will be lowered proportionately.

The arguments against Family Allowances are many and varied. Perhaps the strongest is that in some cases the money will not be spent on the children, but will go to buy something unnecessary for the father or mother. It is only natural to expect that the Government will have some sort of supervision to see that the money will be used for the purpose for which it is intended, the benefit of the child for whom it is paid. Other people argue that Family Allowances will increase the birth rate of the lower and undesirable classes. It is to be noted that the amount paid

for a child is not enough for its upkeep, so that parents raising children for the allowance alone would not be any better off. Others hope that the allowances will improve the quality of the population by encouraging larger families in the middle classes where parents have felt that the future of their children has been too insecure.

Some writers have contended that the money would be spent to better advantage in improving educational facilities, especially in rural districts; securing hot lunches at school; providing recreational centres, or as Scholarships. In this way its benefits would reach only a certain percentage of the children of school age, not all of them, and in all probability would not be giving them what they need most.

(Concluded on Inside Back Cover)

Her Majesty's Message To Women's Institutes

Her Majesty Queen Elizabeth, who is joint president with Queen Mary of the Sandringham Women's Institutes, sent a Christmas message to members of the Women's Institutes throughout the Empire. The message reads:

"Thousands of countrywomen have been organized in directions essential to Victory. Let us now use that great organization, the Women's Institute, in helping to build a happier world, by devoting our efforts to recapturing that home life on which we so much depend, the moral and spiritual training of the citizen of the future, realizing that the foundation of a nation's greatness is built upon the homes of her people."

"We women, as homemakers, have a great part to play."

Sandringham, 1944.

The War Charities Act

by Jean S. Abercrombie

The Act was passed in 1939, and its purpose was the proper direction and control over War Charity appeals to the public. A "War Charity Fund" means any fund having an object and purpose, charitable or otherwise, arising out of the War.

No person or group without registration under the Act can directly or indirectly solicit or make appeals to the public for donations or subscriptions, in money or in kind, for any War Charity.

Upon a recommendation by Miss R. Scott, Q. W. I. Demonstrator at that time, a motion was passed at the semi-annual Board meeting in January 1943, that the Quebec Women's Institutes and Branches become registered, that they might be in a legal position to assist with the War effort.

The Q. W. I. War Charities Fund was registered on March 1943 and upon obtaining the necessary information Q.W.I. Branches were also registered. Registration Certificates were sent out to the several Branches, along with a copy of the Act and Regulations, and a circular letter

calling attention to the requirements under the Act.

Immediately after Dec. 31, 1943, a statement in Form C — this form being sent to all the Branches by Miss Abbie Pritchard, was required to be filed with her and forwarded to the Registrar of the Act at Ottawa.

Some Branches complied with this, but many did not, thinking that as no funds had been raised, no return need be made. It was particularly stated in instructions to Branches Paragraph 8, and in War Charities Act Regulations "That these returns shall be made for every Branch registered."

During the past year your secretary has received a list of these Branches which made no return for 1943. Practically all of these Branches have now reported that nothing has been raised under the Act, and asking that their Registration be cancelled. This has been complied with.

Another annual report for 1944 is now due, and forms are being sent out to all the Branches still registered.

It must be fully realized by all the Branches, however, that it is a punishable offense to solicit funds as stated previously in this article, without registration.

Inflation Danger

Hand-picked from Mrs. Dow's Latest Message to the Consumer Section

Last, but not least by any means, let us not forget *inflation*. That is one danger that is always with us — the danger that inflation might get a head start, and like a prairie fire, run across the country, burning up everything in its path.

Donald Gordon warns us gravely against 'victory inflation'. "Here we are in the fifth year of war," he says "yet in Canada we have suffered no real hardship with respect to our standard of living. Our tables are well supplied, our stores are stocked with merchandise, and above all, we have been spared the horrors of bombardment".

Mrs. Cora Casselman, M.P. of Edmonton said recently: "We are at a time now when we know the chief dangers that beset us. Inflation, hysterical rumors, hoarding and so on. We find that holding the line takes a lot of time and energy as well as plain common sense. We must not let ourselves forget that the war is not yet won — neither on the fighting front nor here at home".

A news-flash from the Maple Leaf, the Canadian soldier's newspaper printed in Brussels says, "The greatest enemy of trade and industry, the absolute destroyer of thrift, is inflation, and while scarcity remains, price control will have to be maintained for the benefit of both consumer and producer".

In order that rural women may have more information on the scientific feeding of their families, the Health

League of Canada has put out an excellent little calendar, approximately 8" x 15", containing a complete chart of the known vitamins, the foods in which they are to be found and the diseases which may be combated by the use of these foods. These calendars would make an excellent addition to any kitchen and will be supplied by the Health League of Canada, 111 Avenue Road, Toronto, to any local organization at a cost of 15c each, for resale at 25c, making a profit of 10c on each calendar for the organization interested.

ETTA H. DOW,

Rural Advisor to the Consumer Branch
W. P. T. B.

Notice to Provincial Conveners

Provincial Conveners are urged to send their reports to the Federated Women's Institutes Conveners at the earliest possible moment.

<i>Citizenship</i>	Mrs. Milton Wade, Glenbush, Sask.
<i>Home Economics</i>	Mrs. B. A. Parsons, Walton, N.S.
<i>Agriculture and</i>	
<i>Canadian Industries</i>	Mrs. Fred Gates, Charlottetown, RR 7, P.E.I.
<i>Social Welfare</i>	Mrs. H. R. Evans, Innisfree, Alta.
<i>Publicity</i>	Mrs. Marion Angus, Box 853, Vancouver, B.C.
<i>War Services</i>	Mrs. E. E. Morton, Vegreville, Alta.

Welfare and Health Notes

by G. A. LeBaron

Blue Cross Hospitalization. As reports have shown that we are not, at present, in a position to form a Provincial Blue Cross group — Branch or County groups may be organized. We will continue to strive for eventual Provincial group membership for two evident reasons: (1) The lack of facilities for hospitalization for the average person in rural areas. (2) Because the Plan gives us a workable means of encouraging the younger women of our communities to join our organization.

It is suggested, that after a group is organized — whether it be County or Branch — the premiums will be paid quarterly, in advance, by the Branch Treasurer to the Quebec Hospital Assn. Office and new members will be accepted only on these dates. (For the present, the dates upon which premiums are due, will be governed by the date upon which the initial premium is paid in each Branch.)

In obtaining the required percentage for membership in the Blue Cross Plan, only *eligible* members are counted to form the total upon which the percentage is based. (This will overcome the difficulty, in some Branches, of a large number of over-age members.)

Following the reception of certain reports showing groups with comparatively few eligible members, a statement has been issued from the Blue Cross Office to the effect that "in groups of limited membership, applications will be accepted from all those desiring to join, irrespective of the percentage required from such groups.

Persons who join the Blue Cross Plan before the age limit of sixty-five years may continue to benefit until the age of seventy years if the premiums are paid regularly.

Women's Institute Branches wishing to join the Blue Cross Hospitalization Plan in the following Counties are requested to contact the Sherbrooke Office of the Quebec Hospital Association: Compton, Megantic, Missisquoi, Richmond, Shefford, Sherbrooke, Stanstead.

All other Counties will contact the Montreal Office.

Public Health and Preventive Medicine. With the problems of post-war reconstruction confronting us, Public Health services need enlarging and improving without waiting for the completion of Health Insurance plans — a measure for the future. Our present task is urged upon us — to take active steps to do all we can in the fields of Public Health and Preventive Medicine. Many of the Public Health services listed in the Draft Bill as compulsory in every Province before Federal financial aid can be obtained to inaugurate Health Insurance in that Province, can be undertaken at once, or existing services enlarged satisfactorily, e.g. Health Unit services.

We believe Health Insurance will be the ideal health service: providing full preventive and curative treatments of every kind to every citizen without exceptions, without

remuneration limit and without an economic barrier at any point.

Family Allowances. This greatly discussed Bill has been passed and comes into force July 1st, 1945. It affects each one of us. More information will enable us to view the measure intelligently. This need was recognized by the Q.W.I. in Board session and a resolution formed and passed. The resolution was later indorsed by the convention of Women's Clubs, held in Montreal, Jan. 26 and 27. This Convention, with the theme "Women in our Changing Economy", included representatives from the Local Council of Women, the League for Women's Rights, the Y.W.C.A. the W.I., and the Jewish Welfare League.

The resolution reads:—

Whereas our Federal Government has enacted a law to become effective on July 1st, 1945, whereby approximately \$200,000,000 is to be spent annually on Family Allowances, and whereas this fund is to be administered by the Provincial Government through the municipalities, and whereas the members of the Quebec Women's Institutes are deeply concerned lest this money may not improve the status of our children as it should, BE IT RESOLVED that we, the Provincial Board of the Quebec Women's Institutes, respectfully urge upon our Federal and our Provincial Governments the desirability of an immediate and thorough educational campaign, by every means available, that our population may be adequately informed as to the most effective use of Family Allowances for the benefit of the children of the nation.

Health Units. A report that the Health Unit system was to be abolished in this Province, for specified reasons is denied emphatically by the Minister of Health. His reply states in part: "not only is there no question of abolishing the County Health Units, but it is the intention of the Government to intensify their activities."

Pasteurization of Milk. Raw milk is one of the greatest sources of communicable diseases, yet Ontario is the only Province in the Dominion where compulsory pasteurization of milk is a Provincial law. In Montreal, only about 85% of the milk marketed is pasteurized.

Literature for Study. Lists of literature—mostly free, may be had upon request from:—

1. The Dept. of Pensions and Health, Ottawa.
2. The Health League of Canada, Montreal.
3. The Metropolitan Life Insurance Co., New York.
4. The Pamphlet Library, Macdonald College.

Reports. As the Provincial Report on Welfare and Health must be sent to the F.W.I.C. convener as soon as possible, all County Welfare and Health conveners are urgently requested to send their annual report so that Quebec Province may receive credit for work accomplished in this department.

Q.W.I. Notes

Argenteuil County. Brownsburg Branch gave cash donations to the Salvation Army and to the Children's Memorial Hospital in Montreal. The Blue Cross Plan of Hospitalization was discussed. The treasury was replenished by catering for a sports occasion. Frontier had an interesting discussion on the culture of the soya bean, led by the local Agronome. A war-bride was presented with a gift, and flowers and fruit given locally. The Central School Board was discussed in Jerusalem Bethany Branch. Mr. Deacon addressing the meeting on that subject. Lachute members have been accepted for the Blue Cross plan. An interesting talk on the Soviet Republic was given by Mrs. A. Taylor. Morin Heights voted \$10. for basketball equipment for the local School. Pioneer Branch also adopted the Blue Cross Plan. The sum of \$5. was sent to the Children's Memorial Hospital. Routine business occupied the time at Upper Lachute East End, followed by a social evening.

Chateauguay-Huntingdon Counties. Mrs. John Fleming gave a paper on The Farm Woman. Franklin Centre had a paper on Heraldry by Rev. T. F. Duncan. Howick sent \$5. to the Victorian Order of Nurses. A paper on the Life and Work of Frances Willard was given by Mrs. John Greig, and Current Events were noted by Mrs. Russell Kerr. Ormstown Branch sent gifts to the Crippled Children's Hospital. An address was given by Rev. Mr. Payne on Registration of Vital Statistics.

Compton County. Brookbury Branch sent fruit to sick in the locality and magazine subscriptions to a convalescent. Canterbury held several social gatherings, including a Valentine party. East Clifton made its annual donation to the Cemetery funds. Several readings were given. A guessing contest with prizes was a feature of the meeting. Sawyerville Branch held a supper to raise funds, and collected and sent clothes to needy families, four large boxes having been sent to date, and collection continued. Scotstown adopted the Blue Cross Plan. The meeting, which was held in the evening had a programme of educational items, among them spelling contest, true or false contest, a memory test, with prizes for the winners. South Newport had a large attendance which was addressed by Mrs. Kirby on the Blue Cross Plan. A silver "shower" for a new baby, cards to shut-ins, and a sale of home-made ice-cream featured the meeting.

Gatineau County. Wright Branch celebrated its sixth birthday, a beautiful cake being provided by Mrs. Ellard. A contest on present-day conveniences was won by Mrs. J. D. Stephenson. Wakefield Branch overhauled its library, listing the books in order. The Blue Cross plan came in for considerable discussion, but no decision was reached.

Huntingdon County. Huntingdon Branch had an address by Rev. Mr. Knowles on Present-Day Problems, and "What Price Freedom." Prizes were given for hand work, won by Mrs. D. Houghton for a crocheted table

cover. The President, Mrs. Antoine, was presented with a birthday gift. A donation of eggs was sent to the Hospital. A demonstration on button-hole making was given by Mrs. Mersen. A presentation was made to a member celebrating her fifty-second wedding anniversary.

Megantic County. Inverness Branch through its president, presented Mrs. Wilson Beattie with a life-membership and pin, in token of appreciation of excellent work extending over a membership of twenty years. Lemesurier Branch purchased an organ for the W. I. Hall. Demonstrations in sewing added to the interest of the meeting.

Missisquoi County. Cowansville Branch gave assistance to fire sufferers, and visited sick ones in the vicinity. Mrs. A. C. Selby's birthday was celebrated at the meeting of Dunham Branch at her home. Gifts and a birthday cake helped to make a happy surprise for the hostess. A sale table and contest added to the interest.

Papineau County. Lochaber Branch received a generous donation in cash from Mrs. Thomas McDermid for the work.

Pontiac County. Beech Grove had a talk on hot supper dishes and an apron parade. Bristol Busy Bees decided to prepare an exhibit for the annual County Fair. A talk on current events was given by Mrs. McMillan. A discussion on the Fair resulted in plans for an exhibit from Lachute Branch.

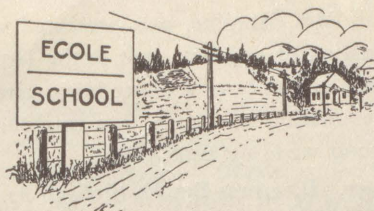
Richmond County. Cleveland planned a social evening open to friends of the Institute members. Denison's Mills presented gifts to three brides, and fruit was sent to an aged lady. Sewing for a sale was arranged for. Melbourne Ridge made plans for a School Fair in the Fall. Discussions on current topics and contests made a busy and interesting programme. Richmond Hill arranged to hold a social evening, and sent comforts to sick and flowers to a bereaved family. Spooner Pond held a food sale to replenish the treasury.

Rouville County. A paper on the Soya bean and By-Products was a feature of the meeting at Abbotsford. A social evening proved successful.

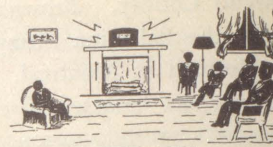
Shefford County. Each member of Granby Hill Branch plans to raise \$2. or more for the work of the W. I. Flowers were supplied for the funeral of a neighbour. Plans were made to entertain the annual meeting. South Roxton had papers on Asbestos, Canadian Birds and other subjects. Plans were made for a food sale.

Sherbrooke County. Brompton Road Branch remembered sick and needy neighbours with timely help. Cherry River held an apron sale, and had a talk on "Smiling" by Mrs. Warren Buzzell. Lennoxville adopted the Blue Cross Hospitalization Plan. Orford had an exhibit of toys.

Stanstead County. Ayer's Cliff Branch offered prizes in the local schools, in a county essay contest. The sum of \$10. was voted towards a local skating rink. Stanstead North provide hot school lunches, also a sunshine basket for an invalid.



LIVING AND LEARNING



Agriculture Faces the Future

A digest of the resolutions and decisions of the Canadian Federation of Agriculture at their Regina meeting

by R. Alex Sim

Appearing not too prominently in the February 26 issue of the Montreal Gazette appeared a story of the meeting of the delegation of the Canadian Federation of Agriculture with the cabinet of the Dominion of Canada. It is not news any more for the organized farmers of Canada to tell the government what farmers want in reasoned, closely-documented terms.

Even young farmers can remember when a delegation to Ottawa was refused audience with the Prime Minister, or when hundreds of westerners marched on Ottawa with demands for better prices.

What has caused the change? Is it the solid building that has gone into the Canadian Federation of Agriculture? Is it that food is needed now and was not needed in quantity then? Is it that public opinion has swung over to the farmers side? If so what did it, the butter shortage or National Farm Radio Forum? Anyway farmer representatives put their brief before the cabinet, and it isn't news any more.

Looking Over the Resolutions

The minutes of the annual meeting were published on 18 closely typed mimeograph pages. The reader will appreciate the fact that this digest is necessarily sketchy. This is what the C.F.A. recommended.

Floor Prices. The Agricultural Prices Support Act should become effective at once, it should become a part of Canada's permanent agricultural program, the C.F.A. should be represented on Boards which administer price floors, and prices should be applied to the primary product — not to processed food products. This latter clause was hoped to ensure the farmer securing the benefit rather than processors and distributors.

Livestock. On the matter of grading the Dominion Government was asked to see that grading carried through from the producer to the consumer, while rail grading of beef and poultry products was urged, and premium on "A" grade hogs was asked to ensure that adequate incentive be maintained in hog production to assume continuance of our contract with Great Britain. The recurring gluts on the livestock market could be averted if the powers of the Meat Board were enlarged to enable it to purchase livestock, and that such surpluses as can not be

processed in Canada should be exported in an orderly manner to the United States.

Daylight Saving. Since the continuance of daylight saving was no longer needed for the conservation of electrical power, and since it was a source of inconvenience, even of loss to farmers, the Dominion Government was urged to cancel daylight saving regulations.

War Assets. The following resolution was presented for discussion but referred back to the Board of the C.F.A. for action.

"BE IT RESOLVED that in the liquidation of such war assets as war production plants, military camps, housing projects and other kindred projects, as much of them as can be used expediently for the welfare of the people as a whole, should be retained as public utilities or turned over to farm co-operatives or other farm organizations, which will use such assets in the interests of the majority of the people".

R. D. Purdy, Manager of the Alberta Wheat Pools and a director on the War Assets Corporation representing the C.F.A. spoke on the work of the W.A.C. One speaker urged that since war assets had been paid for with the peoples money at a profit, these assets should be returned to the people without a second profit being made.

Marketing. A series of resolutions were passed covering various products and problems:

Following R. J. Scott's address quoted both in this issue and the last issue of the JOURNAL a resolution was passed re-affirming the adherence of the C.F.A. to the principle of legislation to permit producer control of marketing agricultural products, and a draft marketing act was endorsed which it was felt overcame the difficulties which had rendered a previous Dominion marketing act unconstitutional.

It was requested that the Wheat Board be given power to handle coarse grains.

A price of \$3.25 a bushel for flax was requested.

A vigorous promotion campaign for Canadian bacon in Great Britain and elsewhere was urged.

On eggs, the 1945 price was asked for 1946.

Production quotas on wheat to farmers was recommended.

Milk Products. The grave danger of milk production falling off in certain areas was pointed out, as well as the need for securing experienced farm help.

Cheese. Recommendations were: 25 cents a pound in 1945 f.o.b. at factory shipping points, plus the present quality premiums.

Butter. A subsidy of 12 cents a pound until October 1st, and of 15 cents a pound until April 30, 1946.

Fluid Milk. The continuance of the present subsidy of 55 cents throughout the year.

Evaporated Milk. A 30 cent subsidy throughout the year.

Sundry. Other topics were covered either by resolutions or general discussion, they are not less important than the above but our space will only permit us to list each item together here: Scientific Research; Health; Farm Forums; Co-operative Manufacture of Implements; The Veteran Land Act; Rural Industries, Rural Housing, Co-operative Films, Air Policy and World Trade.

The Farmers' Council Meets to Plan

The Quebec Council of Farm Forums met in the Queen's Hotel on Friday, February 23 to lay plans for its spring and summer program. The business of the Council was extensive; some of its high spots were:

1. The annual meeting to be held at Macdonald College June 2.

2. Spring and summer rallies are to be planned by the district committees or representatives.

3. County representatives are to be elected as soon as possible.

4. The National office and the CBC were asked to carry on a summer program.

5. Scholarships were voted for Camp Macdonald again this year.

6. Mr. H. C. Bois and the Coopérative Fédérée were thanked for providing hospitality for the Council, and for arranging this year for the first time an English speaking section of their annual meeting.

Future for Farmers

As agricultural leaders saw it at the Canadian Federation of Agriculture meeting in Regina, January 1945.

Hon. Jas. G. Gardiner,
Dominion Minister of Agriculture.

"Our present markets at home can only continue if the purchasing power of industrial and commercial workers is maintained. Our markets abroad can only be maintained if consumers there have purchasing power and we are prepared to supply them on as favourable terms as others are prepared to do. This latter requires either that our own cost of production be kept down to the level of our competitors or that we be prepared to subsidize producers to the extent of the difference between our own costs and what we can obtain in the foreign market. I have not met any bilateral trade controller who is prepared to guarantee a market at any price no matter how high and few who will accept a dumped product at any price".

Dr. Howard R. Tolley, chief,
Bureau of Agricultural Economics,
U.S. Department of Agriculture.

"If we assume, for instance, a general price level about the same as in 1943, a post-war national income of 150 billion dollars, and moderate improvements in agricultural technology, and if our foreign trade follows past relationships to our national income, United States farmers could produce in 1950 on 20 million acres less crop land than was actually used in 1943 all the products that the market — including an export market twice as large as that we had just before the war — all that this market would absorb even under conditions of full employment at home. Farm prices would stand at an average of about parity, and cash income from farm marketings would total about 17 billion dollars, or 2 billion less than the 1943 level. But if we should have about 7 million unemployed — that is, if 12 to 15 percent of all those who will want jobs are

unable to find them — the cash income of farmers would fall to two-thirds that of the full employment level. With the recurrence of a depression such as we had in the early 1930's, farm income would fall to one-third that of the full employment level, but farm production would decline very little and farm markets would be gutted and demoralized.

"The first 'must', therefore, in a program to maintain agricultural production and incomes at approximately war-time levels would seem to be the adoption of domestic policies designed to maintain nonagricultural employment and wages at high levels. Only in this way can a satisfactory export market be maintained, because the urge to impose tariffs, and all manner of restrictions on international trade is greatest when general economic stagnation threatens. Then each nation goes on the defensive to give what is left of the "home market" to its own citizens."

R. J. Scott, president,
United Farmers Cooperative Co., Toronto.

"When we speak of foreign markets, however, we think very largely of a market in Great Britain. When our products arrived in Britain we will, I think, require better receiving facilities than this nation ever had before; facilities for receiving and holding sufficient quantities that will satisfy the public that we are no longer an in-and-out in the British market. The product should be received, properly stored, rigidly graded and sold with a degree of showmanship that only continuity of supply will permit. "Our interest as farmers in our product must extend not to the initial sale, but clear through to the British consumer. We must endeavour to find out what he wants. Find out what his particular concerns are and seek to supply them. Otherwise competition will drive us from the market."

STRIPPINGS

by Gordon W. Geddes

Yesterday, Stanley and I finished the job of cutting next winter's wood. Three more loads to haul and then we'll be ready for the sawyers. Keeping the home fires burning is quite a job with all the extra snow to contend with and the extra work to do at the creamery. We still have to get it sawed and then make little ones out of big ones before sugaring starts. By the time this is printed sugaring will be started whether the wood is split or not.

Speaking of sugaring, there should be plenty of snow for a good crop but there isn't much frost in the ground. The snow will go down quickly in warm weather, too, for it isn't packed at all. We go clear to the bottom of it everywhere in the woods. As far as I know, the government haven't got to the bottom of the matter of rationing maple products except to make maple butter un-rationed. With butter scarce this should make the maple kind quite popular. The cut in sugar ration makes it look as if the need for rationing maple products might be as great as ever but the method of doing so could be greatly simplified by putting maple products and honey on a separate coupon or coupons. Then everyone would have coupons for a reasonable amount of these sweets and there would be less black market. If necessary, the value of the preserves coupons could be cut on the other products to compensate for the extra coupons. Anyway, the coupon system is better than the condition existing with mill-feeds.

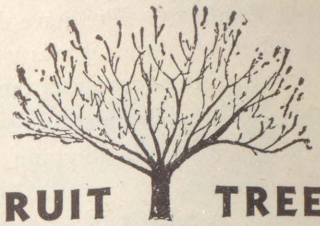
No coupons are required for them but you can't get them just the same. Now that we have to feed the unhealthy white flour that human beings have existed on to the hogs instead of the vitamin rich shorts they used to get, it makes one wonder if pork will cease to be such a good source of thiamin or B1. It is supposed to have nearly eight times as much as beef. Perhaps, though you'd rather take your vitamin straight from the wheat or from a bottle instead

of letting a hog process it for you. On the other hand, without the B vitamin maybe the pigs will cease to eat like hogs and take longer to get to market.

Anyway, we have a cat that believes in vitamins. She lost both her appetite and her interest in life until she got a chance to steal some of Trixie's vitamin pills. A couple of them pepped her up so that we give her some of her own. In spite of what they did for her Trixie doesn't believe in them and has to be coaxed into taking them—but no teasing is necessary for the cat! she'd take her own and Trixie's too if she could get a chance. They'll have me taking them yet though Heaven knows (and so does Dot) that I don't lack appetite.

The weatherman tried to make us really appreciate the film "Trees To Tame The Wind" for it nearly blew us out of the sleigh on the way down. Certainly, the shelter-belts did great things in the United States but they are not yet quite as necessary here. Probably they would not grow quite as fast here though we might be surprised at what cultivation would do to speed the growth. When we think that in Old Ontario the proportion of wooded land is less than in the thickly populated countries France, Germany and Great Britain, we realize that the time for shelterbelts may come even here. The Town Forest idea so well described in Food For Thought, is a worth-while post-war project. It should appeal to Coaticook for the prevention of more floods. Many a town could benefit from such a means of protecting the quality and quantity of their water supply as well.

Another article in the same magazine about Adult Education going active was most interesting. It pointed out that adult education was changing from education for the sake of knowledge to education for action to make this old world a better place to live. And we must have a lot of both education and action in that line for we have thought of so many ways of destroying each other that we must now think of some way to keep from using them.



FRUIT TREES

Complete assortment of No. 1 early Summer, Summer, early Fall, late Fall and Winter varieties of Apple Trees, also Currant Bushes (black, red and white), Grape Vines, Blueberries, Raspberries and Strawberries.

Price List on request

28 Telephone *Lancaster 4191



FAST-SAFE-SURE!

Remit by
**CANADIAN
NATIONAL
EXPRESS
MONEY ORDER**

For Sale at all

**CANADIAN NATIONAL RAILWAYS
STATIONS and EXPRESS OFFICES...**

Farm Forums must 'go active' at every opportunity if we are to benefit from them. Neither should they wait for the chance to present itself but they should hunt for it. Ways to help ourselves are more important than finding ways for the government to help us. A democracy is not supposed to support its citizens but to give them a chance to support themselves and it. One place in which we would like to see the Forums 'go active' is in support of H. H. Hannam's important statement that the safest road to prosperity lay in making agricultural prices a measuring-stick and bringing other artificially raised prices down to that level both nationally and internationally. It is a project that would take a lot of effort but so does winning a war. If we would work as hard for peace, we could have it.

An Exciting Race

Every year on every farm there is an exciting race — a race between weeds and crops. The farmer should bet on crops and do everything possible to handicap weeds, advises George Knowles, at the C.E.F.

Every crop has within itself some power to compete with weeds. It is the farmer's duty to develop that competitive power to the maximum. Every weed, virile as it may seem, can be handicapped to some extent. How to do this should be common knowledge.

Normally, wheat, oats and barley are considered poor competitors with weeds, but if they are seeded about fifty per cent heavier than usual and fertilizer is applied in the drill with the grain they become effective smother crops.

Growing grain crops presents an excellent opportunity for handicapping annual weeds. The seedlings of annuals are easily killed. Harrowing with a light harrow or finger weeder just as the seedlings emerge kills millions of these tiny plants and prevents them from maturing more seed to infest the soil.

Most farmers recognize buckwheat as a smother crop, but it needs help. Buckwheat is often called upon to tackle the killing of a vigorous stand of couch grass. This is too much to expect of any crop.

Land intended for buckwheat should be ploughed in the preceding fall. Then after the rush of spring seeding is over there is usually time to cultivate this fall ploughed area several times. When the weather is favorable it is a good idea to take up as many as possible of the couch roots and either haul them off or burn them. After this kind of treatment, buckwheat can usually be depended upon to finish the couch grass.

The value of alfalfa as a means of smothering thistles and a number of other perennial weeds, but not couch, is well known to most alfalfa growers.



**"Best hired-man
I've ever
had!"**

▶ That drum of Imperial Oil fuel for tractors means a lot these days to the hard-pressed, short-handed Canadian farmer. It's the power behind his tractor—a "hired man" that works for just a few pennies a day, and speeds up ploughing, seeding, harvesting and many other jobs around the farm.

With farm labour scarcer than ever this year, it's vital to keep your farm machines on the job. Safeguard their performance, increase their life by using dependable Imperial Oil Lubricants and Fuels designed for farm service. Your friendly Imperial Oil Agent will bring them to your door. But it is important that you place your order now so that you will be assured of having the products you need in good time.



IMPERIAL OIL LIMITED

... There is an Imperial Oil Product
for Every Farm Use.

WANTED

For the Department of Soldier Settlement and Veterans' Land Act, Province of Quebec

**Settlement Supervisor, Veterans' Land Act, Grade 2,
(Male), \$2,400 Plus Bonus**

**Settlement Supervisor, Veterans' Land Act, Grade 1,
(Male), \$1,800-\$2,400, Depending Upon
Qualifications Plus Bonus**

Open to Qualified Residents of the Province of Quebec

Duties

For the class Settlement Supervisor, Veterans' Land Act, Grade 2

Under direction, to be responsible in a given district for the appraisal of land for full-time farming and for small holdings, and for the selection and purchase of live stock and equipment; to supervise farm management operations within the district and advise settlers as to methods of production, marketing, etc.; to make collections of due payments with respect to established veterans; as required, to supervise the work of junior Fieldmen or to carry out specialized assignment; and to perform other related work as required.

For the class Settlement Supervisor, Veterans' Land Act, Grade 1

Under direction, to be responsible in a given territory for the appraisal of land for full-time farming and for small holdings and for the selection and purchase of live stock and farming equipment; to supervise farm management operations within the district and advise settlers as to methods of production, marketing, etc.; to make collections of due payments with respect to established veterans; and to perform other related work as required.

Qualifications Required

For the class Settlement Supervisor, Veterans' Land Act, Grade 2

Graduation in Agriculture from a university of recognized standing; a sound knowledge of soils, field husbandry and animal husbandry, based on practical farming experience; at least two years of experience in agricultural work subsequent to graduation, preferably with Soldiers' Settlement or other farm credit organizations; ability to supervise staff; knowledge of modern office practice; ability to meet the public; good physical condition; good judgment.

For appointment to this class of position appointees must have had at least two years of experience in agricultural work subsequent to graduation regardless of their length of service in the Armed Forces.

For the class Settlement Supervisor, Veterans' Land Act, Grade 1

Graduation in Agriculture from a university of recognized standing; a knowledge of soils, field and animal husbandry, preferably obtained through practical farming operations; one year's experience subsequent to graduation in agricultural work, preferably with a land settlement or farm credit organization; good physical condition; ability to meet the public; good judgment.

For the Grade 1 class temporary appointments may be approved for those who have not University Graduation but who indicate from past experience that they have sufficient knowledge to efficiently perform the duties involved.

NOTE

For the above positions, candidates are required to have sufficient knowledge of the English and French languages to be able to discharge efficiently the duties involved.

Nature of Examination

A rating on education and experience will be given from the sworn statements, supporting documents and other evidence submitted by applicants on and with their application forms. Candidates should give full particulars regarding their training and experience, especially as they bear on the qualifications for and duties of this class of position. An oral examination may be given if necessary in the opinion of the Commission. No examination fee is required.

Application Forms

Application forms, properly filled in, must be filed immediately with the office of the Civil Service Commission at 132 St. James St. W., Montreal, P.Q.

Application forms are obtainable at all City Post Offices, Post Offices in the larger towns, offices of the Employment and Selective Service, District Offices of the Civil Service Commission at Montreal and Quebec, or from the Civil Service Commission at Ottawa.

Competition number 44-2785 should be quoted.

A "New" Theory of Inheritance

In the December issue of the "Short-horn News", James Gibson discusses 'selecting the dual-purpose sire'. Parenthetically he remarks, "a new theory on inheritance which will be of great interest to livestock men in general has received considerable attention recently. It has to do with the inheritance of acquired characteristics and deals with man's ability to control changes in heredity". He goes on to discuss briefly the effect this "new" theory may have with particular reference to the Short-horn breed.

The theory that acquired characteristics are inherited is very far from a new one. It was suggested well before the time that Gregor Mendel's demonstrated the mode of inheritance which forms the basis for our present conception of heredity.

Belief in the inheritance of acquired characters has been dying a slow but hard death. Just about the time when it appears to be finally put to rest, it bobs up again.

It is not so surprising that the theory is hard to dispose of. Anyone can observe the pronounced effect of environment on living organisms. Two individuals of the same species that have essentially the same inheritance

may be so modified by environment that they will appear different from one another. Similarly, in the plant world particularly, races may develop in certain localities or habitats.

A superficial analysis would immediately lead to the conclusion that environment had modified the inheritance. Actually such a view cannot be substantiated. Races do develop in specific localities and they do so on account of the environment but the inheritance factors are nevertheless not in any way affected. Such races invariably develop from a population with a mixed inheritance. Some individuals in such a population by virtue of their inheritance are better suited to the particular environment than are others. They may be earlier maturing, more drought resistant or the like. Such individuals have a much better chance of being propagated and hence over a period of years will dominate the group. Inheritance however has not changed — there has only been a natural selection of the best equipped members of a mixed population.

Many experiments have been devised and conducted to prove that acquired characters are inherited. They have uniformly failed to confirm the theory. —L.H.H.

The Care of Package Bees

Package bees will soon be arriving in Canada from the United States and preparation for their care should be made beforehand. Those who are expecting such packages should first of all make arrangements with their nearest express or customs officials for prompt delivery, remembering that a war exchange tax of ten per cent of the bees' value must be paid to Customs before the bees are released.

For each package one hive fitted with ten drawn combs or full sheets of foundation is needed to house the bees and in addition from ten to fifteen pounds of sugar or honey are required to feed them.

As soon as the packages are received stand them in a cool, shady place and feed the bees by sprinkling a thin solution of sugar and water on the screening of the packages, says the Dominion Apiarist. During late afternoon or evening release the bees in their hives following the directions that accompany the bees or as given in Special Pamphlet No. 3, Wartime Production Series, a copy of which may be obtained from the Dominion Department of Agriculture, Ottawa. If the weather is cloudy and cool the bees may be released immediately upon arrival.

It is not the bees you receive that will produce the honey crop, but those



STEELE, BRIGGS SEED CO.
LIMITED

TORONTO • WINNIPEG
REGINA • EDMONTON

SOLD BY LEADING MERCHANTS

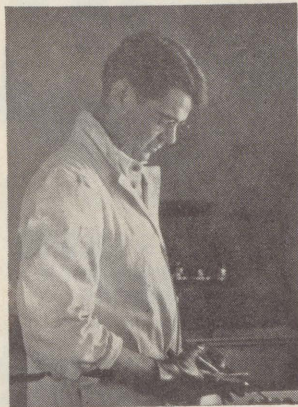
which can be reared between the time the packages are placed in the hives and the time the clovers are in bloom. This means that the bees must not be allowed to run short of feed at any time. Start feeding as soon as the bees are in the hive and keep feeding until the bees are well established and obtaining enough from the fields for their needs. The best food is honey, but never give it to bees unless absolutely sure that it was produced by disease free colonies. White sugar dissolved in equal parts water is the best substitute. To secure the sugar for feeding bees ask your Provincial Apiarist for the necessary permit giving him your full name and address, the number of colonies or packages to be fed and the minimum amount of sugar required.

*Buy
Victory Bonds*



THE COLLEGE PAGE

Pro Patria



The sad news that Capt. Douglas B. McRoberts, Canadian Reconnaissance Regiment, was killed on active service in Italy on January 15th, 1945, was recently received at Macdonald.

Doug. McRoberts, whose home was in St. John, New Brunswick, came to Macdonald College in 1937 and took the first two years in the degree course. In 1939 he

took the position as laboratory assistant in the Institute of Parasitology and soon proved himself to be a skilled technician. It was in no small measure due to Doug's enthusiasm, energy and ability that a large amount of work on the action and uses of phenothiazine was accomplished during those years. He did the necessary hundreds of blood counts and estimations of parasite infections quickly and accurately. He was never dismayed or disgruntled by the long hours of routine work so essential for the collection of reliable data. In addition to his day-time work he carried on full duties with the Macdonald C.O.T.C. and even managed to attend evening parades in the Reserves in Montreal. He resigned his position in the Institute to "go active" in 1942, and soon afterwards was posted from the ranks to the Brockville Officers' Training Centre. He completed his training in the Tanks at Camp Borden and went overseas. After a period in Britain he went to North Africa and from there to Italy. For several months he was in command of a reconnaissance unit on active duty at the front; he had a brief period behind the lines as Intelligence Officer, but in December, 1944, was back on active reconnaissance.

Douglas McRoberts will always be remembered as a high-principled and stout-hearted gentleman by all who knew him, and particularly by those whose good fortune it was to be associated with him in the work at the college. The heartfelt sympathies of Doug's many friends at Macdonald will go to his mother at St. John, to his brothers in the U.S.A. and to his cousin Miss McCoubrey of the College staff.

Sgt. Robert McKinnel, M.M.

Diploma Course, 1936-37

On September 9th, 1944, The Black Watch (R.H.R.) of Canada attacked and captured the town of Grand Mille Brugghe in the face of very stiff opposition. D Company, whose position centered on a farm building, suffered heavy casualties in taking their objective.

The company were experiencing considerable difficulty in holding off repeated enemy counter attacks and were under heavy mortar and artillery fire. Two Bren carrier sections, commanded by Sgt. McKinnel, were sent forward to reinforce the company.

Sgt. McKinnel brought his carriers into the position through heavy artillery and machine gun fire which swept the entire company area. Immediately appreciating the gravity of the position he assisted in the reorganization of the defences. He then organized the evacuation of the wounded in his carriers.

When a serious shortage of ammunition developed he went out and, completely ignoring the withering fire to which he was exposed, brought in the much needed ammunition from his carriers. He was painfully wounded but refused to be evacuated, continuing to care for the other wounded and assisting in their evacuation. He was again wounded while bringing in a critically wounded soldier who was lying helpless in the open, exposed to continuous mortar and artillery fire.

He finally collapsed from exhaustion, due to loss of blood while still assisting his wounded comrades. Throughout the engagement he displayed magnificent courage and made possible the provision of ammunition essential for the successful holding of the position. His bearing and conduct under most difficult and dangerous conditions were an inspiration to all ranks and were undoubtedly determining factors in the success of the operation.



Practical Hints for Shearing Sheep

In view of the great importance of wool in wartime, and the added bonus which is paid for proper care and preparation, farmers should use a little more care in marketing their wool clip.

Many farmers were disappointed last year because they did not get the bonus. This was due to the wool being damaged or dirty. In many instances the feed had been thrown over the backs of the sheep all winter and no effort was made to remove even the hay and straw clinging to the outside at shearing time. Tags and the short dark hair and wool from the legs was wrapped up in the fleece, and the wool was badly prepared.

Shearing is an art which few farmers have mastered, due largely to lack of experience. Since it is a matter of more money in one's pocket and of importance to the war effort, a little more care should be taken this year. When

shearing, choose a nice day and a clean place to work. Wool should not be shorn when the sheep are damp from rain or in a dirty pen or the end of the stable. The shears should be held loosely in the hand and run close to the body to avoid double cutting. Don't pull the wool away from the shears, let it roll. When it has been removed, the fleece should be properly rolled, tied and packed. To roll properly, spread it on the floor, flesh side down. Turn in the belly ends and roll from the rear end. Once it is rolled, tie with paper twine and if none is available, use the neck piece to tie it together or pack it loose. Do not use binder twine. Keep the clippings, tags, etc., separate. Pack tightly into sacks for shipment and keep in a dry clean place until shipment is made. This is one way to insure just a little more profit in an important side line on many farms.

This Is Real Hardship

The water shortage in Ontario has brought forth many stories regarding the difficulty of farmers obtaining sufficient water for their stock but one coming from the Foxboro area easily tops them all in downright hardship.

With 25 head of stock on the farm the lone well at the home of Mrs. Neil Davis, 6th concession of Sidney, gave out and highly drifted snow made it impossible to drive the stock to drink at a creek at the north end of the farm. There were no men folks to hitch up horses and break a road to the creek, and for a period of two weeks Mrs. Davis and her daughter, Helen, melted snow on the kitchen stove to supply the 25 head of stock with water.

An average of two pails of water per day for each of the 25 animals was obtained through melting snow, it was stated. Close neighbors were entirely unaware of the difficulty being experienced at the Davis home and not until two weeks had passed did they learn of conditions and break a road through to the creek so cattle could be driven to water.

FAMILY ALLOWANCES . . . (Continued from page 22)

The controversy raised by this subject has shown that it has aroused widespread interest and that the Canadian people are seriously considering all its problems. Whether they are in favour of Family Allowances or not, it is yet their duty to see that the benefits for their children, which they will start to receive next July, are spent in the proper way — for the good of the children themselves.

The booklet "Family Allowances for Canada" is obtainable for the modest sum of 10 cents from the Canadian Association for Adult Education, College Street, Toronto, and is recommended for group study and discussion.

Jones: "How do you spend your income?"

Smith: "About 30 per cent for shelter, 30 per cent for clothing, 40 per cent for food and 20 per cent for amusement."

Jones: "But that adds up to 120 per cent."

Smith: "That's right!"

* * *

A man is that large irrational creature who is always looking for home atmosphere in a hotel and hotel service around the house.



THE WARTIME PRICES AND TRADE BOARD

FARMERS' BULLETIN

MAPLE SYRUP SALES

There are no major changes in prices or in the method of rationing maple syrup and maple sugar this year. Maple butter has been removed from the ration and will be coupon free the same as maple wax (la tire) and maple cream. Maximum prices per Imperial gallon for sales of maple syrup direct to consumers, in screw top metal containers, f.o.b. nearest shipping point are:

Ungraded syrup	\$2.40	Canadian Medium Grade	\$2.90
Canada Dark Grade....	\$2.65	Canada Light Grade	\$3.15

Prices will be 25c less if sold in bulk. If sold by grade, the grade must be clearly marked on container; otherwise price for ungraded syrup applies. Grading must be in accordance with the Maple Industry Act and the colourimeter approved by Federal Department of Agriculture.

A premium of 25c per gallon over the "Canada Light" price has been fixed for syrup grading "Fancy".

MAPLE SUGAR:—Maximum selling prices per pound are:

Loose-packed in bags or other containers, commonly known as "farmer's run"	.22
1/2, 1, 2 or 4 lb. blocks	.35
Maple wax (la tire), maple butter and maple cream..	.35

COUPONS:—Until May 31, one preserves coupon covers purchase of one quart (40 fluid ounces) maple syrup, or 2 lbs. maple sugar. Maple butter, maple wax and maple cream are not rationed. After May 31 one preserves coupon will be good for 24 ounces of maple syrup.

A farmer may use his own maple products on his own premises without surrendering coupons. He must collect coupons for all direct sales of rationed maple products off the farm, and forward coupons to his Local Ration Board.

MAIL ORDERS:—Loose coupons must not be accepted with mail orders. In exchange for four preserve coupons a special voucher, covering purchase of one gallon of maple syrup, can be obtained from Local Ration Board. Producers must not ship syrup unless this voucher accompanies order.

Vouchers received by producers may not be transferred, exchanged, negotiated or deposited and should be forwarded to Local Ration

Boards by 10th of each month in postage-free Farmer's Envelope, RB-61, together with coupons and other valid ration documents from other maple product sales.

POTATO STORAGE CHARGES

Order A-1430 setting ceiling prices for table stock potatoes provides that storage charges may be added to the ceiling prices in each zone commencing November 1, 1944. Total storage allowances which may be added for the period from March 1 to April 1 are 20 cents per 75-pound bag; 27 cents per 100-pound bag.

NO HAY EXPORT PERMITS

Because of domestic needs, no further permits are being granted for the export of hay from the 1944 crop. Farmers who have supplies and pressers are requested to do all they can to get their hay to the domestic market so that those engaged in industries essential to the war effort are not handicapped.

CEILING PRICES FOR TRUCKS

Ceiling price regulations similar to those recently applied to used cars have been established for used trucks and trailers. Maximum prices are set for reconditioned vehicles sold by dealers. If a dealer sells a vehicle which is not reconditioned or if a private individual sells a vehicle, whatever its condition, an amount equal to the estimated cost of putting it in good operating condition (at least 10% of the ceiling price) must be deducted from the ceiling price for that type of vehicle.

If a used truck is sold by a dealer as reconditioned, a 30-day warranty is implied. If within this period the purchaser finds the vehicle is not in good operating condition the dealer must make the necessary repairs or replacements at a charge not exceeding 50% of the lawful maximum price allowed for labour and parts.

Every truck offered for sale must carry a tag giving a complete description of the vehicle. If the truck is not reconditioned, the estimated cost of putting it in operating condition must be shown. Statement of sale signed by both buyer and seller must be completed in triplicate and a signed copy filed by the seller at the nearest Board office within 4 days of the date of sale.

For further details of any of the above orders apply to the nearest office of the Wartime Prices and Trade Board.